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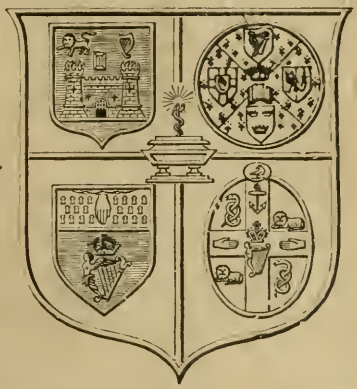

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2. Report on the Sanitary Conditions of Cape Coast Town. By M. Logan Taylor, M.B., Ch.B. Liverpool School of Tropical Medicine. Memoir VIII. 1902. Pp. 19.

3. Second Progress Report of the Campaign against Mosquitoes in Sierra Leone. By M. Logan Taylor, M.B. Liverpool School of Tropical Medicine. Memoir V., Part 2. 1902. Pp. 13.

4. Mémoires couronnés et autres Mémoires publiés par l'Académie royale de Médecine de Belgique. Tome XV. Neuvième Fascicule. Bruxelles: Hayez. 1902. 8vo. Pp. 47.

5. The Diseases of Infancy and Childhood. By L. Emmett Holt, M.D., LL.D. Second Edition. London: Henry Kimpton. 1903. 8vo. Pp. 1161.

6. International Clinics. Vol. III. Twelfth Series. 1902. London: J. B. Lippincott Company. 1902. 8vo. Pp. viii + 306.

7. Transactions of the American Otological Society. Vol. VIII., Part 1. New Bedford, Mass.: Mercury Publishing Company. 1902. 8vo. Pp. 165.

8. Surgery of Tubercular Cavities of the Apex of the Lung. By de Forest Willard, M.D. Philadelphia. 1902. Reprint. Pp. 24.

9. Selected Papers on Operative and Clinical Surgery. By the late William Stokes, M.D., M.Ch. (Univ. Dub.); F.R.C.S.I., Knt. Edited by William Taylor, M.A., M.B. (Univ. Dub.), F.R.C.S.I. London: Baillière, Tindall & Cox. 1902. 8vo. Pp. 484.

10. Excision of the Lumbar Lymphatic Nodes and Spermatic Vein in Malignant Disease of the Testicle. By John B. Roberts, M.D. of Philadelphia. Reprint. 1902. Pp. 11.

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12. Cancer and other Tumours of the Stomach. By Samuel Fenwick, M.D., F.R.C.P., and W. Soltau Fenwick, M.D. Lond., M.R.C.P. London: J. & A. Churchill. 1902. 8vo. Pp. xvi + 362.

13. Who's Who. 1903. An Annual Biographical Dictionary. Fifty-fifth Year of Issue. London: Adam & Charles Black. 1903. 8vo. Pp. 1530.

14. The Englishwoman's Year Book and Directory. 1903. Fifth Year of New Issue. Edited by Emily Janes. Twenty-third Year of Issue. London: Adam & Charles Black. 1903. 8vo. Pp. 340.

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16. Encyclopædia Medica. Under the General Editorship of Chalmers Watson, M.B., F.R.C.P.E. Vol. XII. Syphilis to Typhus Fever. Edinburgh: William Green & Sons. 1902. 8vo. Pp. 523.

17. Reports of the Society for the Study of Disease in Children. Volume II. Edited by George Carpenter, M.D. London: J. & A. Churchill. 1902. 8vo. Pp. xxxiv + 310.

18. A Text-book of Obstetrics. By Richard C. Norris, M.D., Editor, and Robert L. Dickinson, M.D., Art Editor. Second Edition. 8vo. Vol. I. Pp. 554. Vol. II. Pp. 547. London and Philadelphia: W. B. Saunders. 1902.

19. The Treatment of Fractures. By Charles Locke Scudder, M.D. Third Edition, thoroughly revised. Philadelphia and London: W. B. Saunders & Co. 1902. 8vo. Pp. 485.

20. Atlas and Epitome of Traumatic Fractures and Dislocations. By Prof. Dr. H. Helferich. Edited by Joseph C. Bloodgood, M.D. Fifth Edition. Philadelphia and London: W. B. Saunders & Co. 1902. 8vo. Pp. 353.

21. La Pre-tuberculose et le Sanatorium de Banyuls-sur-Mer. Par Georges La Fargue. Paris: C. Naud. 1902. Pp. 47.

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3. Pacific Medical Journal. Vol. XLV. Nos. 9, 10, 11. September, October, November, 1902. San Francisco.

4. Treatment. Vol. VI. Nos. 7, 8, 9. London : Rebman.

5. The St. Louis Medical and Surgical Journal. October, November, December, 1902. St. Louis, Mo.

6. University of Penna. Medical Bulletin. October, November, December, 1902. Vol. XV. Nos. 8, 9, 10. Philadelphia, U.S.A.

7. Comptes rendus de la Société d'Obstetrique, de Gynécologie, et de Pædiatrie de Paris. Tome IV. Sixième, septième et huitième fascicules. Juin, Juillet et Octobre, 1902. Paris : G. Steinheil.

8. The Laryngoscope. Vol. XII. Nos. 9, 10, 11. September, October, November, 1902. St. Louis, Mo., U.S.A.

9. The Monthly Cyclopædia of Practical Medicine. Philadelphia. September, October, November, 1902. The F. A. Davis Co. New Series. Vol. V. Nos. 9, 10, 11.

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15. Revue Générale de Pathologie interne. Cinquième Année. Numéros 17, 18, 19, 20, 21, 22. Paris. 1902.

16. The Printer's Engineer. September, October, November. December, 1902. London : Walker Brothers.

17. The American Practitioner and News. Nos. 112, 113, 114, 115. Vol. XXXIII. Louisville, Ky. 1902.

18. The Journal of Balneology and Climatology. Vol. 6. Part 4. London : John Bale, Sons & Danielsson. October, 1902.

19. Blätter für klinische Hydrotherapie. Wien. XII. Jahrgang, Nos. 9, 10, 11. September, October, November, 1902.

20. Gaillard's Medical Journal. Vol. LXXVII. Nos. 2, 3, 4, 5. August, September, October, November, 1902. New York.

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23. The Journal of Comparative Neurology. Vol. XII. No. 3. September, 1902. Denison University, Granville, Ohio.

24. Intercolonial Medical Journal of Australasia. Vol. VII. No. 10. October 20, 1902. Melbourne : Stillwell & Co.

25. Russische medicinische Rundschau. No. 1. Jahrgang, 1902-1903. Berlin : Max Hirsch. 1902. Pp. 100.

26. American Gynecology. Vol. I. No. 5. November, 1902. New York.

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CONTENTS.

THIRD SERIES, No. 373.—JANUARY 1, 1903.

PART I.—ORIGINAL COMMUNICATIONS.

PAGE

ART. I.—A Case of Lymphadenoma associated with Recurrent Fever. By HENRY T. BEWLEY, M.D.; Physician to the Adelaide Hospital, Dublin; and J. ALFRED SCOTT, M.D., F.R.C.S.I.; Pathologist to the Adelaide Hospital, Dublin; and Professor of Physiology, R.C.S.I., - - - - - - - 1

ART. II.—The Control of Consumption by the Public Health Authority. By T. PERCY C. KIRKPATRICK, M.D., Assistant Physician to Dr. Steevens' Hospital, Dublin, - - - - - 7

ART. III.—Bettws-y-Coed as a Health Resort. By JAMES DOUGLAS MACDONOGH, L.R.C.P.I., L.R.C.S.I., Tyn-y-Bryn, Bettws-y-Coed, North Wales, - - - - - - - 22

PART II.—REVIEWS AND BIBLIOGRAPHICAL NOTICES.

1. The Johns Hopkins Hospital Reports. Vol. X., - - - 26

2. Diagnosis by Means of the Blood. Illustrated by 154 photo-micrographs of specimens of blood, as observed in general practice, showing products that are found in definite diseases. By ROBERT LINCOLN WATKIN, M.D., - - - - - - 28

3. Von der Nervenzelle und der Zelle im Allgemeinen. Von PAUL KRONTHAL, - - - - - - - - 31

4. The Work of the Digestive Glands. Lectures by PROFESSOR J. P. PAWLOW. Translated into English by W. H. THOMPSON, M.D., M.Ch., F.R.C.S. (Eng.), - - - - - - 33

5. Ligaments: their Nature and Morphology. By J. BLAND-SUTTON. Third Edition, - - - - - - - - 36

6. Treatise on Diseases of the Skin; for the use of Advanced Students and Practitioners. By HENRY W. STELWAGON, M.D., Ph.D., - 37

PAGE

7. Atlas and Epitome of Abdominal Hernias. By Dr. Georg Sultan, First Assistant in the Surgical Clinic in Göttingen, Prussia. Authorised translation from the German. Edited by William B. Coley, M.D.; Clinical Lecturer on Surgery, Columbia University (College of Physicians and Surgeons), &c., - - 38
8. Studies in Heterogenesis. By H. Charlton Bastian, M.A., M.D., F.R.S. Second Part, - - - - - - 38
9. The Journal of Obstetrics and Gynæcology of the British Empire. Vol. I., - - - - - - - - 40
10. Surgical Ward Work and Nursing: a Handbook for Junior Students of Medicine and Nurses. By Alexander Miles, M.D., C.M., F.R.C.S. Edin. Second Edition, - - - - 41
11. Diseases of the Pancreas and their Surgical Treatment. By A. W. Mayo Robson, F.R.C.S.; Senior Surgeon, Leeds General Infirmary; Emeritus Professor of Surgery, Yorkshire College, Victoria University, &c.; and B. G. A. Moynihan, M.S. (Lond.), F.R.C.S.; Assistant Surgeon, Leeds General Infirmary, &c., - 42
12. A Manual of Medicine. Edited by W. H. Allchin, M.D. Lond., F.R.C.P., F.R.S. Ed. Vol. IV. Diseases of the Respiratory and of the Circulatory Systems, - - - - 45
13. Directories for 1903:—1. Who's Who, 1903. An Annual iographical Dictionary. Fifty-fifth Year of Issue.—2. The Englishwoman's Year-Book and Directory, 1903. Fifth Year of New Issue. Edited by Emily Janes, Organising Secretary to the National Union of Women Workers of Great Britain and Ireland. Twenty-third Year, - - - - - 47
14. Verhandlungen des Vereins für innere Medicin in Berlin. Herausgegeben von dem Vorstande des Vereins. Jahrgang XXI., - 48
15. Transactions of the Association of American Physicians. Sixteenth Session, - - - - - - - 50
16. International Clinics. Volume II. Twelfth Series, - - 51

Part III.—MEDICAL MISCELLANY.

The Census of Ireland, 1901, - - - - - 52

Royal Academy of Medicine in Ireland:—

SECTION OF SURGERY.

Laminectomy for Paraplegia due to Spinal Caries. By Sir Thomas Myles, - - - - - - 61
Radical Cure of Hernia in Young Children. By Mr. Denis Kennedy, - - - - - - - 62

SECTION OF MEDICINE.

Erythema Marginatum Perstans. By Dr. Finny, - - 64
Paroxysmal Tachycardia associated with Epilepsy. By Dr. R. Travers Smith - - - - - - 66

PAGE

A Case of Lymphadenoma with Recurrent Pyrexia. By Drs. Bewley and J. A. Scott, - - - - - - 67

SECTION OF OBSTETRICS.

Exhibition of Specimens. By Dr. Hastings Tweedy, - - 67
Notes on a Case of Amenorrhœa. By Dr. John Knott, - 67
Puerperal Eclampsia. By Drs. Neill and McWeeney, - 67

Sanitary and Meteorological Notes. Compiled by Sir John Moore, B.A., M.D. Univ. Dubl.; F.R.C.P.I.; F.R. Met. Soc.; Diplomate in State Medicine and ex-Sch. of Trin. Coll. Dubl.:—

Vital Statistics for Four Weeks ending Saturday, November 29, 1902, 70
Meteorology—Abstract of Observations made at Dublin for the Month of November, 1902, - - - - - 75

Periscope:—

Codein and Glycosuria, - - - - - - 60
Hydrophobia from a Weasel's Bite, - - - - 78
Note on a Curious Epitaph. By Sir Charles A. Cameron, C.B., M.D., - - - - - - - - 79
X-ray Treatment—A Warning, - - - - - 80
Culpable Cause of the Spread of Contagion, - - - 80

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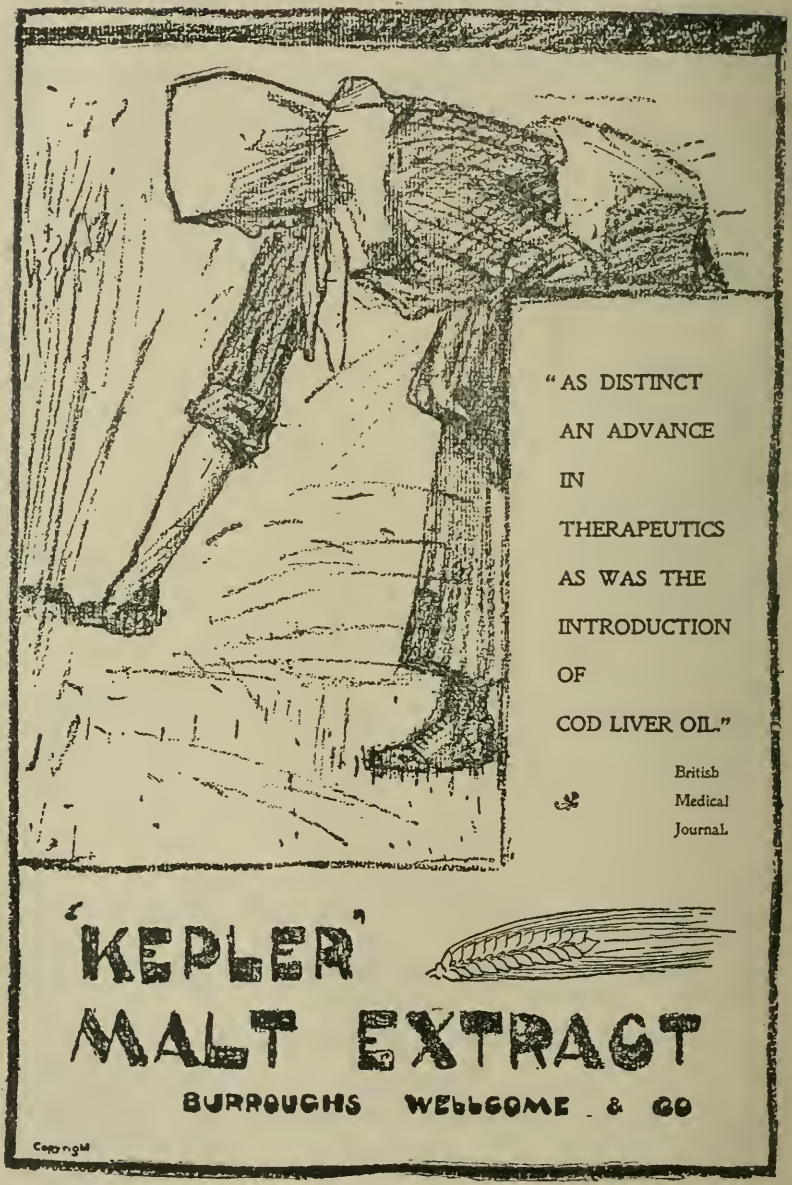
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PART I.

ORIGINAL COMMUNICATIONS.

ART. I.—*A Case of Lymphadenoma associated with Recurrent Fever.*[a] By HENRY T. BEWLEY, M.D.; Physician to the Adelaide Hospital, Dublin; and J. ALFRED SCOTT, F.R.C.S.I.; Pathologist to the Adelaide Hospital, Dublin; and Professor of Physiology, R.C.S.I.

CASES of long-continued pyrexia, not due to any of the ordinary causes—tuberculosis, typhoid, or septicæmia in its usual sense—occasionally occur, and, from their obscurity as well as rarity, deserve some consideration. The case we are about to bring before the Academy presents many features of interest.

CASE.—Mr. H. was born in 1865. His mother died of phthisis. He was a man, strongly built, and about 5 ft. 8 in. in height. He went to sea as an engineer on various cargo-steamers, and was in many places where malaria exists, but never had an attack of this disease. He contracted syphilis 6 or 8 years ago, and was treated with mercury; it was a mild attack, and he never had any recurrence of its symptoms. He remained at his work as an engineer till 1898, when he was employed on a grain-steamer. Here he was greatly exposed to the dust of the grain while the boat was being loaded and unloaded, and he seems to have suffered in some way from its effects. At any rate some of his friends thought he never seemed quite the same man afterwards.

[a] Read before the Section of Medicine of the Royal Academy of Medicine in Ireland, on Friday, November 21st, 1902.

In 1898 he left his work on board ship and became a commercial traveller, travelling mostly in the North of England. His health kept very good till the end of October, 1900. At this time he began to feel poorly; he became disinclined for work, lost his appetite, and developed a cough. He consulted a doctor in Hull, who found his temperature was 101° or 102°, and believed he heard some râles in his right apex. The doctor concluded Mr. H. was developing phthisis, and advised him to come home.

I saw him at his father's house in Ranelagh., Dublin, on Nov. 11, 1900. His temperature was raised, and he obviously felt very unwell, but I could not detect any physical signs of disease in either lung. In fact there was no sign of illness except the pyrexia. There were no spots; his spleen was not enlarged; his urine was healthy; his pulse quiet, from 66 to 80; his heart sound; his bowels were rather confined, so that an occasional dose of cascara or other purgative was needed. He could take light food fairly well. He had some cough, rather paroxysmal in character, and tending to end in retching, and occasionally in vomiting. From the absence of every other obvious cause of fever I began to suspect an anomalous case of typhoid, and Dr. Scott kindly examined his blood for me. He found Widal's reaction present, though not in a very marked degree; so we concluded the disease was typhoid.

The attack lasted four weeks; then, after a week's interval of normal temperature there was a relapse of 10 days' duration; then, after 10 days, a second slighter relapse of 10 days. After this his temperature remained down; he grew stronger; ate largely and grew fat, and went to Llandudno on Feb. 6, 1901. He remained there for a month, and though he became fairly well he never got quite strong, and suffered from cold perspirations; also from pain and tenderness in his feet.

He came home on March 7, 1901, very fairly well, but soon developed a cold and again became feverish. I again failed to detect any physical sign of any disease. He, however, was more ill than during his first attack, less able to take food, and more depressed. His temperature, the course of which was quite irregular, tended to rise. On April 9th Dr. Little saw him with me, and agreed with me that all his organs were healthy. Arguing, however, from the paroxysmal cough, which often ended in retching, he thought there were probably enlarged intra-thoracic glands, either syphilitic or tubercular, irritating some of the

nerves in the thorax.—a view which is remarkably borne out by the autopsy.

Mr. H. became worse; began to be delirious at night; his temperature was found to be persistently about 103°. Dr. Scott again examined his sputum, urine, and blood. The urine was healthy; there was no trace of tubercle or malaria; there were no microbes found in the blood; the blood count was as follows:—

Red blood corpuscles, 3,570,000 per cm.

1 or 2 white in 2,288.

Hæmoglobin, 90% = 1·3 normal, per red blood corpuscle.

All treatment—quinine, mercury, arsenic—was quite ineffectual. It looked as if he was going to die, when on April 26 his temperature began to fall; fell to normal in 3 days; never rose again; and in a week he was out in the garden, practically well. His family had nursed him, but on April 25 a nurse came, and the improvement seemed to date from several enemas which she gave him, and which thoroughly cleaned out his bowels.

On May 10 he went to Howth and seemed well, but could only walk a short way owing to numbness and tenderness in his feet, which I thought might be due to slight neuritis.

On May 18th his temperature again began to rise; Dr. Little had suggested a sea voyage, and he now resolved to go to Monte Video, for which place he sailed on May 30, the temperature being then about 103°.

The fever continued till he left Rio on his way back, about the beginning of July. He came home on July 23 looking well and stout. He was able to walk 3 or 4 miles, but still complained of his feet. He spent a month in Co. Wexford with friends, and became very fat—almost 14 stone in weight. He came home on Oct. 9, but soon became dull, apathetic, disinclined to go out. I saw him again on Nov. 2, and found again fairly high fever, with nothing apparent to account for it. He steadily became weaker, took but little food, and as he could not be nursed properly at home came into the Adelaide Hoepital on Nov. 18. From that time on his temperature was from 102° to 104°; his bowels were rather confined; he needed occasional purgatives; the urine contained a trace of albumin. Dr. Scott examined his blood on Nov. 26 and found—

Red blood corpuscles, 3.725,000.

White blood corpuscles, 1 in 600.

Hæmoglobin, 37·5% = ½ normal, per red blood corpuscle.

Thence he became steadily worse; his pulse became weak and frequent, 100, 120, 140. Rhonchi developed in the bronchial tubes; he became delirious, then comatose, and died, as fever patients die, of heart failure on Dec. 2nd, 1901.

To sum up :—This man came of a tuberculous family; had had mild syphilis about 1895; was quite strong till November, 1900, when a fever commenced which lasted over five weeks, and was followed by two relapses of 10 days' duration each. He was well for about six weeks; then (about March 15th) a condition of high fever came on and lasted six weeks, ending by crisis on April 27th. On May 18th pyrexia again came on, lasting till the beginning of July. Then he was well till the beginning of November, when high fever recommenced and lasted four weeks—till his death. During all this time, if we exclude the first attack and the relapses, which were probably due to enteric, no one could discover any cause whatever for his pyrexia.

The *post-mortem* examination showed that the body was well nourished, although not so stout as he had formerly been. In the thorax a large mass could easily be seen under the sternum, in front of the trachea. This lay over the upper portion of the pericardium, and extended on each side above and behind the roots of both lungs, lying round the œsophagus, and behind the heart. Roughly, its dimensions were about 4 inches wide at the upper part, and about 5 inches long at the back. It was made up of a number of ovoid masses, like large lymphatic glands, about $\frac{1}{2}$ inch to $1\frac{1}{2}$ inches in diameter. These when cut appeared a light grey colour, with black spots scattered through them (absorbed carbon). In some cases these latter were absent. A small separate mass of similar appearance, about $\frac{1}{2}$ inch diameter, was attached to the inner pleural surface of the upper lobe of the right lung, extending about half its size into the lung substance. The middle lobe contained a small oval mass $\frac{3}{4}$ inch long, apparently calcified at the centre.

In the abdominal cavity more of these apparently enlarged glands existed at the attachment of the mesentery round the aorta, and in the mesentery a calcified mass, about 1 inch long, was found. A small grey spot was noticed on the liver surface. The spleen was enlarged, measuring about 6 inches by $3\frac{1}{2}$ inches, and weighed 1 lb. 2 oz. The surface was mottled with irregular, light patches, which could be felt to be firm, and which appeared

on section to be in the substance of the spleen. Those at the capsule look like small infarctions.

The intestines were examined through their whole length. Peyer's patches were almost completely absent. In one spot a few follicles were scattered over an area, which was thinner and paler than the surrounding portion, and other oval pale portions could be seen, about the size of a Peyer's patch. These were probably the scars of old typhoid ulcers. No *increase* of the lymphoid tissue was seen.

The heart, brain, kidneys, suprarenals, and thyroid were normal.

Microscopically, the appearances of the thoracic tumours and the growths in the liver and spleen were very similar. Those in the thorax are principally composed of fibrous tissue strands, with a few cells lying between them. Most of the cells are small, similar to lymph cells, with a few larger ones, some of which have apparently more than one nucleus. In the spleen the fibres were finer, but otherwise the general description was the same.

The appearances agree with those described by Greenfield (*Path. Soc. Jour.*, 1878, XXIX., p. 272), as found in some cases of lymphadenoma, and is apparently the same condition called by Virchow lympho-sarcoma. There are two extreme forms found in this disease. In the majority of cases they appear to be simply enlarged glands with, perhaps, an apparent removal of the normal structure by an overgrowth of cells. In other cases—whether a later one or not it is difficult to determine—there is an overgrowth of the connective tissue fibres, with an inverse reduction in the number of lymph cells, together with the presence of multinucleated cells, possibly endothelial. Occasionally the arrangement of the cells suggests the appearances seen in some sarcomata, which is emphasised by the tendency of these tumours to form metastatic growths in other organs. The growths at present under consideration apparently belong to those cases associated with an increase of the connective tissue, the appearance being very like those figured by Greenfield.

Sections from various portions were examined for micro-organisms, none being found. I thought some would have been there from the history of steamer dust. While it is possible that such may be present which cannot be stained

by present methods, it is also conceivable that they may have been a factor in the case at an early stage and have vanished subsequently. This, indeed, has been noticed in a case quoted by Shaw (*Edin. Med. Jour.*, Dec., 1901), to which our attention was directed by Dr. Little, which has been of great use. None were found in this case when the blood was examined during one of the febrile attacks. Might it not be possible that such were inhaled a couple of years ago when on the grain-steamer, and that these micro-organisms started some interstitial inflammation which continued to increase, although the actual cause was removed. There was no leucocytosis on either of the occasions when the blood was examined—a result which is not surprising in the light of the *post-mortem* examination, so many of the lymph glands being reduced to simple masses of fibrous tissue.

It is difficult to discuss the question of the intermittent high temperature; nothing was seen which would give any reason for it. Micro-organisms have been seen in published cases coinciding with the periods of high temperature, but not in this case.

The temperature appears to be generally higher than normal in Hodgkin's Disease, though not always intermittent. In these cases it has been suggested that the high temperature coincides with the period of active growth of the tumours where such do not grow quite regularly.

Which of these two views is correct? Do some cases of lymphadenoma form in their growth some poison which causes fever? or are the attacks of fever due to the more or less accidental entrance into the body of microbes? To these questions it is not yet possible to give any definite answer. Dr. Shaw (*loc. cit.*) favours the latter view. The closing sentence of his paper will express much of what is known on this obscure subject. He writes: "Consideration of the above cases impresses the view that 'lymphadenoma with recurrent fever' is not a special form of disease; that such cases are due to a terminal infection occurring at any time during the last year of life of some patients affected with lymphadenoma; that the nature of the bacterial invasion is different in different cases; and that in some cases proof of a bacterial invasion is wanting; that in a consider-

able number of cases of lymphadenoma with recurrent fever there is a great constitutional disturbance with elevation of temperature, rigors, vomiting and diarrhœa, anorexia and malaise; that in some cases urobilinurea is a marked symptom; that in some of the cases the superficial lymphatic glands and even the spleen became very tender and enlarged during the attacks; and that the skin over the enlarged glands may become reddened and show an increase of local temperature. Finally, that the prognosis in such cases is, as a rule, hopeless, and that the duration of life after the onset of the periodic attacks of fever averages about seven and a half months, but may be as much as twelve or fourteen months."

ART. II.—*The Control of Consumption by the Public Health Authority.*[a] By T. PERCY C. KIRKPATRICK, M.D., Assistant Physician to Dr. Steevens' Hospital, Dublin.

IN the year 1897 the Dublin University Biological Association held a special general meeting, at which many distinguished guests were present, for the purpose of calling public attention to the spread of tuberculosis in the City, and resolutions were passed urging the authorities to take steps to prevent the spread of infection. This was, I believe, the first such meeting held in this country, and preceded by a considerable time the inception of the great anti-tuberculosis campaign which is at present being waged with such success in other countries. Ever since that time this Association has taken a very deep interest in the movement, and it seemed to me that a review of what has been already done in the past, as well as suggestions for our guidance in the future, would be a very suitable subject for my opening address.

The question is one of very pressing interest to us Irishmen, since the disease is so widespread and destructive amongst us, and since our country occupies the unique and unenviable position of still having an increasing mortality from tubercular disease. I do not wish to weary you with statistics,

[a] Inaugural Address delivered at the opening meeting of the twenty-eighth session of the Dublin University Biological Assiociation, November 27th, 1902.

but when I tell you that in this country in the year 1900 phthisis caused 10,076 deaths, out of a total of 87,606, or a rate of 225·6 per 100,000 of the estimated population, or more than one-ninth of the rate from all causes combined, you will see that it is time we were up and doing if we do not wish to be left hopelessly behind other countries in the advance towards that satisfactory condition of public health which Preventive Medicine appears to promise. In other countries the efforts to prevent phthisis have been rewarded with a very marked degree of success. Thus in the City of New York the death-rate from phthisis has been reduced by over 30 per cent. since the adoption of preventive measures some ten years ago, and similar gratifying results have been obtained elsewhere. Let us consider then carefully the methods by which these results have been obtained, and by a study of the conditions existing in our own country see if we can learn any useful lessons for our future guidance.

In Manchester, Dr. Niven, the able Medical Officer of Health, assisted by your distinguished Vice-President, Dr. James Beatty, has been carrying on an active campaign against tuberculosis, and also has given us a very full account of their methods. As early as the year 1894 the campaign was opened in Manchester by the distribution of handbills to every house in the city, giving instructions in precautionary measures; but at that time there was no possibility of ascertaining whether the measures so advised were adopted or not. I think we may fairly conclude that, among the poorer classes at all events, very little attention was paid to such instructions. In order then to enable the Public Health Authorities to exercise some supervision over such cases, and, where necessary, enforce the adoption of preventive measures, a very complete scheme was drawn up and adopted by the City Council in the year 1899, and this, with certain additions and modifications, has been in force ever since. The main lines of this scheme may be grouped under the following heads :—

1. Voluntary notification of consumptive cases.
2. Education of the public in general, and of the patient and his friends in particular, in the nature of the disease.
3. Treatment of the patient's surroundings.

4. Supervision.
5. Provision of isolation hospitals.
6. Protection of the food supply from contamination by the tubercle bacillus.

By far the most important part of this scheme, from an administrative point of view, is the adoption of notification, as without this the Executive has no means of knowing where the cases are, and so is unable to carry out effectively any preventive measures. In Manchester no attempt was made to bring phthisis under the provisions of the Infectious Disease Notification Act of 1889, but practitioners were asked to notify cases, and a scale of fees payable for such notification was drawn up. The names and addresses of the cases notified were registered, and if it was thought advisable further steps were taken with a view to supervision and inspection. A very important adjunct to notification in the form of the free bacterial examination of sputum was undertaken for medical practitioners, so that in all cases the diagnosis could be confirmed. If such examination gave negative results the medical man was asked whether he still adhered to his diagnosis, and if so, the case was considered one of phthisis from an administrative point of view. The education of the patient and his friends in the nature of the disease is personally undertaken by the assistant medical officer, who visits the house after the case has been registered. An effort is made to educate the public generally by the posting of notices pointing out the danger of promiscuous spitting in railway stations, tramcars, public-houses, common lodging-houses, and workshops, &c. As yet Manchester has not gone as far as Glamorganshire, where the County Council adopted the following by-law by a majority of eight votes:—"A person shall not spit on the floor of any public carriage, any church, chapel, public hall, waiting-room, school-room, theatre, or shop, whether admission has been obtained thereto by payment or not. Any person offending against this by-law shall be liable to a fine not exceeding £5." There is, however, little doubt that a similar by-law will be adopted by many more of the County Councils in the near future.

As regards the treatment of the surroundings, the assistant medical officer reports any sanitary defects in houses visited,

and they are dealt with by the ordinary methods of the Sanitary Department, while the special disinfection is carried out under the supervision of the sanitary inspectors. The ceilings are lime-washed, the walls are rubbed down with dough, the floor, woodwork, and furniture are washed with ordinary soap and water. This process the inhabitants carry out themselves under supervision. If, however, the house is very dirty, or evidently infected, the Corporation disinfects the walls, floors, ceilings, and articles of furniture by washing with one per cent. solution of chlorinated lime, the paper usually being stripped from the walls in every case. The clothing, bedding, &c., are disinfected by steam. Some such process of disinfection is, of course, carried out in our own City by the Public Health Department in every case of infectious disease which is notified among the poor. Regular supervision of infected houses is undertaken by the sanitary visitors or inspectors, and a continuous record of the state of the house kept, while a quarterly disinfection or thorough cleaning of the house is insisted on in every case. As Dr. Beatty says, supervision is the most difficult part of the scheme to carry out satisfactorily, yet it is remarkable how smoothly it works on the whole, and how seldom the visits are resented, or there is any refusal to carry out the precautions suggested. The value of such a scheme of supervision from an educational point of view can hardly be overrated. Manchester has not yet been able to do much in the way of provision of hospital accommodation, either as sanatoria for the early cases, or isolation hospitals for the advanced cases, but in this respect there will probably be a marked advance in the future. Very elaborate precautions are adopted to prevent infection by either meat or milk; but in view of the pronouncement of Koch on the transmissibility of bovine tuberculosis, it is hardly to be expected that other places will adopt any new or expensive methods of prevention in this department while the question is still *sub judice*.

The adoption of precautionary measures in New York City is largely due to the energy of Dr. Herman Biggs, who has given such an admirable description of what has been done there. The first official action was taken in New York in the year 1889, when the Board of Health asked the consulting

pathologists of the Department for a report on the causation and prevention of tuberculosis. This report was presented in the same year, and laid particular stress on the following points :—Tuberculosis is a preventable disease ; it is not directly inherited, but transmitted from the sick to the healthy, chiefly by means of dried sputum suspended as dust in the air. From this report, presented twelve years ago, we learn as fully and completely as we can at the present day the nature of the problem that we have to deal with, and all subsequent work on the subject has simply confirmed and amplified these statements. Various suggestions were made in the report as to the measures which should be adopted with a view to prevention, dealing chiefly with food inspection, education, and disinfection of premises inhabited by tubercular patients. On the receipt of this report the Board of Health consulted with many of the leading physicians of New York, and as a result decided that the medical profession and people were not prepared to accept active preventive measures founded on the belief that tuberculosis was an infectious disease. This being so, little was done except inspection of food and an endeavour to disseminate knowledge as to the nature of tuberculosis. So effectively, however, was this latter measure carried out that during the winter of 1893–94 the Board of Health, on the recommendation of Dr. Biggs, adopted certain resolutions giving effect to the following principles :—Notification, inspection and disinfection of infected dwellings. A request was made for the voluntary notification of cases of tuberculosis under the care of the physicians in the city. It was pointed out to the physicians that this information was solely for the use of the Department, and that in no case would visits be made by the inspectors unless the patient resided in a boarding house, tenement house, or hotel, except at the request of the attending physicians, and even in the case of such places if the physician requested that visits should not be made, and signified his willingness to afford the necessary instruction to the patients, no further steps would be taken by the Department. Compulsory notification was adopted in the case of public institutions, such as hospitals, prisons and asylums, &c. Visits of inspection, with a view to affording instruction and to report on the necessity for further

steps, were determined on in the case of tenement houses, boarding houses and hotels, except in those cases provided for above. In every case where the premises which had been occupied by a consumptive were vacated, either by death or removal, visits were made by the inspector, who directed the removal of infected articles such as bedding, carpets, &c., for free disinfection by the Department, while the owner was compelled to have the premises disinfected at his own expense. No person other than those residing there at the time were allowed to occupy such apartments till this order had been carried out. Bacteriological examination of the sputum was undertaken free of charge by the Department, provided that it was sent in bottles accompanied by a paper setting forth the name, age, sex, and address of the patient. Suitable bottles and blank forms to be filled in were supplied free to those who wished to make use of them.

In the year 1897 the Board of Health adopted a resolution making notification of tuberculosis compulsory, and applied to the Board of Estimate and Apportionment for funds to provide hospital accommodation for those suffering from pulmonary consumption. A sum of 60,000 dollars was granted for this purpose in the year 1898, but in subsequent years this amount was somewhat reduced. From this brief outline of the features of the movement in New York we can learn much that will be useful for our guidance at home; but before we proceed to apply these lessons let us glance for a few moments at the results that have been attained by them.

During the first year after the commencement of the work 4,166 cases of tuberculosis were notified, during the second year 5,824, during the third year 8,334, while in 1900 the cases numbered 11,997; the number of houses inspected has increased proportionally. As a result of this, Dr. Biggs is able to make the following statement :—

"There has been a reduction in the mortality from tuberculous diseases in New York City since 1886 of more than 35 per cent.; and I have no hesitation in saying that I believe with a complete and efficient scheme for dealing with pulmonary tuberculosis, including hospital accommodation and the proper enforcement of precautionary measures, the death-rate from the tuberculous diseases in New York City may

be further reduced one-third within a period of five years. This would mean a saving of 3,000 lives annually."

Such, then, is a brief history of what has been done in two great cities such as Manchester and New York, and we may take it as typical of what is being done, in a smaller way perhaps, almost all over the civilized world. In our own country, and especially in our own City of Dublin, there is ample evidence of the necessity for some such war against consumption, and in the face of the results obtained elsewhere the guardians of our public health incur a grave responsibility if they delay much longer its commencement. I propose to devote the remainder of the time at my disposal in considering a plan of campaign which would be applicable to our conditions here.

It is no longer necessary to argue the question of the advisableness of municipal control of public health; it will, I think, be granted that under present conditions it is only by such authority that large questions of public health can be at all satisfactorily dealt with. However much may be done by private enterprise and philanthropic associations, we can expect little permanent advance without the constant co-operation and assistance of those who alone can make compulsory and universal the adoption of those preventive measures on which such advance will depend. I do not wish for one moment to suggest any hostility towards those public and private associations which have done so much for us in the past, in the foundation and management of hospitals and the spreading of knowledge of sanitary matters; but I believe that they, from their very number, are inadequate to deal with such a question as the prevention of consumption. Taking for granted then that the already constituted Public Health Authorities are the proper bodies to deal with this question, let us consider what course of procedure we can recommend for their adoption.

It seems almost a truism to say that the first essential in the administration of any disease from a public health point of view is that the responsible authority should be in a position to know where the cases of that disease exist. The only way in which this knowledge can be obtained is by notification, and the only form of notification which has been found to

work satisfactorily is compulsory notification. Although this is so, there is, perhaps, no point in the administration of preventive measures against phthisis which has been so hotly disputed, and about which there are so diverse opinions, as the adoption of compulsory notification. The advantages to be derived from notification are so obvious that it is unnecessary to dwell on them further than to say that without its aid it is difficult to see how any substantial progress can be made. Let us then examine the objections against it, and see if they are of such a nature as to compel us to abandon a means from which so much good is to be expected. Much confusion has arisen from the idea that if compulsory notification is adopted it is necessary to put in force in regard to phthisis all the provisions of the Infectious Diseases Notification Act, and consequently render phthisical persons who expose themselves in public liable to the penalties which that Act entails. Such a state of affairs would undoubtedly be intolerable in the case of a chronic disease like phthisis; depriving, as it would, many who were well able to work of their liberty, and involving the State in an enormous expense for their support. It is this idea which appears to pervade the late Sir Richard Thorne's objections which he published in the Harben Lectures in the year 1898, on the Administrative Control of Tuberculosis. Thorne said that, in his opinion, "a large amount of harm would result if phthisis were included in the list of diseases notifiable under the English Act." The same idea appears to pervade the minds of other objectors, even though they have no objection to offer to the notification of the acute infectious fevers.

There is no doubt that at first notification appears a hardship and a breach of that most sacred trust, professional secrecy; but we must remember that the principle has been accepted on the grounds of public utility, and in many cases in this country the provisions of the Act have been voluntarily adopted by the District Councils, though they are composed almost entirely of laymen. If the lay public wish to absolve medical men from this bond of secrecy, in definite cases and for definite ends, there does not appear any reason for objection on the part of the medical men themselves. Notification to the sanitary authority does not mean notification to the

community at large, and, if carried out on the lines adopted in Manchester and New York, does not involve any hardship to the individual unless that individual, by his neglect of proper precautionary measures, makes himself a source of danger to the community. Surely in such cases the community has the right of protecting itself from such persons. There is one objection which I fear will carry more weight, in this country at all events, than all the others, and that is the expense involved. It is unreasonable to expect, and unfair to ask, medical men to work for nothing, and undoubtedly the notification fees in a city like Dublin would form a considerable item for some years to come. We must remember, however, that it is an item which will decrease rather than increase, and which promises the very best value for the money expended. No doubt the fact that one case would be notified again and again by different practitioners would add to the expense. This appears to be unavoidable; but the difficulty would, I believe, be greatly lessened if medical men were asked to try and find out as far as possible if the cases had been already notified. There is another difficulty, and one to my mind of much more importance than those already urged, and that is the impossibility in many of the early cases of making any sort of an accurate diagnosis without a bacteriological examination of the sputum. It would be out of the question to expect the busy and overworked dispensary medical officers to undertake such examination. Thus to make notification efficient some method of free examination of sputum must be devised. This, of course, would be quite simple if we were provided with a properly fitted bacteriological laboratory. The necessity for such an institution in the city has been urged again and again, but so far without result, apparently on account of the expense it would entail. Although such an institution would be of the utmost value, not only for the administrative control of phthisis, but for the sanitary administration in general, yet I believe that it would not be an absolute essential, at the outset at all events, in our campaign against phthisis. For the detection of tubercle bacilli in sputum no costly or elaborate appliances are necessary, and I believe it would be possible for the sanitary authority to carry it out even with the means at their disposal in the

city at present. It is possible now in private cases to have the report of a skilled bacteriologist on tubercular sputum at the cost of three shillings. In the City of Manchester for the year 1901, specimens to the number of 517 were examined for the Public Health Authority, under the supervision of Professor Delépine, at Owens College. Would it not be possible for the Public Health Authority here to contract with pathologists in the various centres of the city to examine sputum, and report to them the results at a cost which would be quite insignificant compared with what would be necessary for the establishment and equipment of a laboratory? In Manchester during the same year 1,339 fresh cases of phthisis were notified, while 1,142 deaths were recorded; so that from these figures we may conclude that in Dublin the adoption of the scheme I have outlined would not be so very costly.

The immediate result of the adoption of such a scheme will be to place the sanitary authorities in a position to deal with tuberculosis both effectively and cheaply. Let us see then what measures we can recommend to them for this purpose. The future extinction of tuberculosis can be hoped for only as the result of the combined efforts of the community, both lay and medical, and the only way that we can obtain such a combination is by the education of the public in the nature of the disease. One of the first duties then of the sanitary authority will be the diffusion of such knowledge. This will be much more simple and direct when given to the patients and their friends than when simply given to the public in general. Information about matters which personally concern us or our friends is much more likely to be fruitful than when to us it appears merely of general interest. The sanitary inspectors will be able to impart such information to patients of the poorer classes directly, and at the same time give instruction how the danger of infection of the healthy by the diseased may be avoided. For this purpose, as well as to see that the instructions given are carried out, regular and systematic inspection of the homes of the tubercular should be carried out. The whole experience of sanitary supervision at the present day tends to show that such inspection will be welcomed rather than objected to, in spite

of what *à priori* considerations would lead us to believe. I feel sure I shall not be contradicted when I say that sanitary inspection of the homes of the poor, when carried out by properly authorised persons, is almost always well received. To such inspection and supervision should be added periodic disinfection of the houses, and for such purpose I cannot suggest any better method than that which I have described as carried out in Manchester under the control of Dr. Beatty. Here again experience confutes our preconceived ideas. I have had some experience of the disinfection of the homes of the poor as carried out in the case of the acute infectious fevers in this city, and though I know well how thorough this is, and how much discomfort the people are necessarily subjected to, yet it is rare to find any objection raised to it—rather they seek it and ask for it on their own initiative.

There is one other part of any scheme for the prevention of consumption to which I must allude—a part, too, which appears at the outset to be far the most formidable of all. I refer to the provision of isolation hospitals. I have heard it stated by a competent authority that every bed in all the Dublin hospitals could be filled with consumptive patients without exhausting the supply of such patients in the city. I do not think that this greatly, if at all, over-states the case, and the question at once arises how can we possibly provide accommodation for such a multitude with the funds at our disposal. In the first place, I should like to point out that the Public Health Authority has only to deal with, and provide for, the health of the community at large, and not with that of the individual. Consequently, it is only so far as the health of the individual affects that of the community that it comes within the jurisdiction of the Public Health Authority. Consumptive patients, then, come within the jurisdiction of this authority, because of the danger which exists of their spreading the disease, and because of their number, which causes such an important item in the increase in the death-rate. Were it not for the existence of the first of these two reasons the Public Health Department might completely neglect the consideration of phthisis. Take, for example, the case of cancer. The death-rate from this disease in Ireland during the year 1900 was ·6 per 1,000, and caused 1,469 more deaths

than small-pox, measles, scarlatina, and diphtheria taken together; yet since, so far as we know at present, a cancer patient is not in himself a source of danger to the community, the Public Health Authority takes no steps as regards his control. This is a point of great importance, since it absolves the Public Health Authority from direct responsibility for the provision of sanatoria for the cure of the disease. Of course, in so far as such sanatoria are a valuable means of prevention they come within the scope of this authority, but only so far. There are two separate and distinct classes to be dealt with in regard to hospital accommodation—those early cases in which permanent arrest or complete cure may be expected, and those cases which are so far advanced that no improvement beyond mere alleviation of symptoms can be hoped for. With the adoption of proper precautionary measures the first class need not be a source of danger to the public at all, and it is only in so far as they form the constant recruiting ground for the second class that it becomes our duty to try and cure them by the provision of sanatoria. Such patients, however, are isolated in sanatoria for their own good, and it is difficult to see how they could be compelled to enter such institutions against their will, provided they conducted themselves in such a way as not to be a source of danger to others. With the second class it is different, for since they are unable to work and support themselves they will in consequence be unable in the majority of cases to adopt the necessary precautionary measures, and so may fairly be compelled to submit to isolation. While then we look on sanatoria for the treatment and cure of phthisis as a most useful preventive measure, still they must not be considered as essential; and even without their aid we may hope for a very large measure of success in our efforts towards the stamping out of the disease. Let us see, however, if we cannot make more use of the means already at our disposal, for there is no doubt that in the near future, when the public become more alive to the necessities of the case, the provision of funds for the erection of sanatoria will be much more readily forthcoming. At the present time it is the rule in our Dublin hospitals to refuse as far as possible admission to phthisical patients, on the grounds that they are unsuitable for treatment in a general

hospital. I say advisedly as far as possible, for cases are constantly presenting themselves with hæmorrhage or some other complication, which renders it impossible to refuse admission. In consequence of this you will constantly find phthisical patients in the general wards of our hospitals side by side with other patients who are, perhaps, in a condition which renders them peculiarly liable to the infection. That this state of affairs does exist I have satisfied myself by personal investigation, and under the present circumstances, do what we may, it must exist. If each hospital were compelled to open at least one ward for each sex solely for the reception of phthisical patients it would be possible to isolate these cases, and the benefit from the point of view of the education of the patients would be enormous. I know that there are many objections to such a scheme, but none of them appear to me to be insuperable. First of all, we must remember that the hospitals are primarily for the benefit of the sick poor, and it seems unjust to exclude such a large and deserving class as the phthisical, while it is equally unjust to submit those who are not so suffering to any unnecessary risk. Thus, quite apart from any anti-tubercular campaign, there is a distinct need for some such arrangement. Then we are told that the air of a general hospital is most unsuitable for the treatment of such cases, but we must remember that very many cases are greatly benefited, when suffering from some complication such as hæmorrhage or an acute attack of bronchitis, &c., by a few weeks' residence in hospital. In such cases it may make all the difference to the possibility of their future cure. Again, in cases which are rapidly approaching their end such wards would be most suitable, as it is far preferable that they should disseminate their infection in a ward reserved exclusively for persons with the same disease than that they should do so in their own homes. I cannot believe that these wards, if properly cleaned and periodically disinfected, would be a source of danger in themselves. The chief objection is on the score of expense—the hospitals say that they cannot afford to open special wards, but the expense would be trivial compared with what would be necessary for the erection and establishment of special sanatoria. If the Corporation and the Trustees of the Hospital

Sunday Fund would make some special extra grant to hospitals which provided such wards this objection would probably vanish at once. I do not wish to be understood as claiming that such a scheme would do away with the need for sanatoria altogether, but it would satisfy the pressing need for them from the point of view of the Public Health Authority, and so greatly lessen the initial expense of our campaign. It seems hardly possible to apply the insurance system towards the maintenance of sanatoria in this country, as has been done with such success in Germany. Free medical attendance is so easily obtained by everyone of the working class that any attempt to establish such a system of insurance, if the premiums had to be deducted from the weekly wages, would probably meet with great opposition. Most of our large trading and manufacturing companies do provide medical attendance not only for their employees, but also for their wives and families. It is just in this class that consumption is most rife—that is, among those who have to spend their lives in factories and work-rooms, where the most favourable conditions for infection are to be found. Would it not be possible for some of the great trading companies to join together for the purpose of founding and maintaining sanatoria for the treatment of consumptives among their employees and their families? I feel sure that the funds so used would not be grudged by the shareholders, and the good which would result from such a scheme would be incalculable.

I have endeavoured to tell you briefly how other countries and municipalities have tried to deal with this great problem of the prevention of consumption and the means which experience has shown it necessary to adopt to attain this end. I have also endeavoured to sketch for you the outlines of a scheme which we might adopt in this country to meet the pressing wants of public health. In formulating this scheme I have tried as far as possible to make it practical rather than ideal, remembering that the poverty of our country precludes the possibility of our adopting any scheme which would involve it in great expense. We must remember, however, that the money so expended is for the advancement and improvement of the race, and if through this expenditure

we can reduce the mortality and morbidity from phthisis we are effecting a real economy in the national wealth. Vast sums of money are being spent on the education of the people, which are no doubt necessary for the advancement and improvement of the community; but the very existence of the race in the future will depend on the success of our efforts in Preventive Medicine.

With the increased aggregation of population in the great industrial centres, and the increased facility for communication between these centres, the spread of infectious or contagious diseases has become a much more important question than it was in the past, and any neglect of the precautions for the prevention of disease is likely to be visited with much more severe and instant punishment. Great improvements are at the present time being effected in the surroundings and housing of the working classes, and it is expected that a corresponding improvement in the public health will follow as a result. No such improvement will, however, follow in the case of consumption unless steps are taken to prevent the spread of infection.

Let me urge on you one and all the necessity of individual effort to further this great work both by example and precept. It is a true saying which tells us that legislation must follow and not lead public opinion; and since public opinion in such a matter must be largely formed by the teaching of medical men, a great responsibility is laid on us. It is not enough that we should know and do what is right ourselves, but we must teach others to know and do likewise. Mistakes will doubtless be made, and we do not claim that our knowledge is perfect, but we do claim that our knowledge is clear and definite enough to point the way along which we must go, and it is only by going along that way that we can ever hope either to increase our knowledge or approach that goal which we all desire so much to reach.

ART. III.—*Bettws-y-Coed as a Health Resort.* By JAMES DOUGLAS MACDONOGH, L.R.C.P.I., L.R.C.S.I., Tyn-y-Bryn, Bettws-y-Coed, North Wales.

BETTWS-Y-COED has been called the Paradise of Wales; and although I think all admit the beauty of its scenery, many are under the impression that it is very relaxing and has a very heavy rainfall.

Having come here as an invalid—against the advice of many—I would like to be permitted to state the result of some of my observations during 4 years' residence.

Bettws-y-Coed is situated about 90 feet above the sea level, and a little over 20 miles from the sea. It is sheltered from cold winds by pine-covered hills; and yet from the direction of its valleys sufficiently open for free ventilation, especially towards the north and west. It is traversed by the Rivers Conway and Llugwy, which receive numerous tributaries from the mountain sides, and after heavy rain these become small torrents, which wash the surface and increase the ever rapid flowing rivers.

No stagnant water remains here. The rocky bed of the rivers and many intervening waterfalls assist in oxidising the water. These rivers are of great utility in draining the soil, and also in cooling the atmosphere in summer.

The soil is gravel, very porous, and the rainfall is rapidly absorbed, the roads becoming dry in a marvellously short time, even after heavy rain.

The annual rainfall (on the average of 3 years) is 46·10 inches, being very much less than many places not far distant—Beddgelert, for instance, has a rainfall of over 100 inches annually.

The temperature of Bettws-y-Coed is higher than that of many surrounding places in the winter—a difference of 10 or 12 degrees having been noticed within 6 miles.

Snow seldom lies on the ground for many days, although it may be on the surrounding hills.

Fogs are practically unknown here. Thunderstorms are exceedingly rare in this part of North Wales, perhaps from the equability of the temperature.

Bettws-y-Coed is very much sheltered from the east wind

and from storms in general—a strong breeze here representing a gale in the channel.

The winter of 1901–2 was the most severe in Bettws-y-Coed for several years, and the following particulars apply to that year :—

Table I.

1901–2 Month	Maximum in sun	Minimum at night	No. of days or nights below 32°	No. of days 50° or above	Mean lowest temperature
	°	°			°
October -	84	36	Nil	30	40·0
November -	82	[a]22	9	22	37·7
December -	66	20	8	12	36·4
January -	68	22	9	16	38·9
February -	78	17	15	18	31·20
March -	82	30	3	29	40·27

The configuration of the place, the shelter by mountains, the area covered by trees, the interception of rainy winds by the high mountains between Bettws-y-Coed and the sea-coast, all tend to the formation of an equable climate with a medium rainfall.

Concerning the climatic effects on the health of the inhabitants, I have referred back for 20 years to the causes of death, and find a great freedom from rheumatic fever, influenza, pneumonia, pleurisy, and kidney disease.

Rheumatism and kidney disease especially seem uncommon, which may, perhaps, be accounted for by the absence of lime or chalk, the softness of the water, and the porous nature of the soil. I have known several rheumatic patients decidedly improved by residing here.

The only disease to which I have remarked Bettws-y-Coed to be generally unsuited is asthma, although I have known one patient to derive benefit from residing here, and another to lose his attacks by removing to higher and more open ground in Bettws-y-Coed.

[a] On 16th November, 1901, the temperature at night was 22° ; on the same night it was at Loughboro' 7°, Oxford 9°, Maidenhead 20°, Henley 16°, Preston 19°, according to the daily newspapers.

TABLE II.—*Death Statistics for 20 years—Bettws-y-Coed.*

YEAR	Number of Deaths from undermentioned Diseases											Total No. of Deaths	Death-rate deducting Visitors	Infants under a year	Deaths over 65 years	Accidents Suicide (1) Manslaughter (1)
	Influenza	Pneumonia	Pleurisy	Rheumatic Fever	Scarlatina	Diphtheria	Measles	Enteric	Phthisis	Kidney Disease	Cancer					
1881	–	–	–	–	–	–	–	–	5	–	–	13	16	1	2	–
2	–	–	–	–	–	–	–	–	1	–	–	9	11	3	3	1
3	–	1	–	–	–	–	–	–	1	–	–	6	7	1	2	–
4	–	–	–	–	–		–	–	1	1	–	10	13	1	5	1
5	–	–	–	–	–	–	–	–	4	1	–	15	17	4	2	3
6	–	–	–	–	–	–	–	–	3	–	–	15	19	3	4	2
7	–	1	–	–	–	–	3	–	3	–	–	15	19	7	3	–
8	–	2	–	–	3	1	–	–	1	–	–	15	18	–	4	1
9	–	2	–	–	–	–	–	–	2	–	–	11	12	–	6	1
1890	1	1	–	–	–	–	–	–	2	2	–	14	17	1	4	1
1	–	1	–	–	–	–	–	–	1	–	2	9	12	2	2	–
2	–	2	1	–	–	–	–	–	–	–	–	10	13	1	5	–
3	–	1	–	–	–	–	–	–	1	–	–	12	15	4	2	–
4	1	1	–	–	–	–	–	–	–	–	–	9	11	1	6	–
5	1	–	–	–	–	–	–	–	3	–	–	14	16	1	8	–
6	–	2	1	–	–	–	–	–	3	–	–	13	14	2	2	2
7	–	–	–	–	–	–	–	2	–	–	–	8	9	2	2	1
8	–	5	–	–	–	–	4	–	2	–	–	16	19	3	2	–
9	1	1	–	–	–	–	–		3	–	1	14	14	2	3	1
1900	3	3	–	–	–	–	–	–	1	–	1	14	16	2	2	–
Total	7	23	2	–	3	1	7	2	37	4	4	242	[a]15	41	69	14

Influenza = ages—90, 77, 75, 68, 66, 59, 15.
Pneumonia = secondary cause in 15—4 children; 2 visitors.
Diphtheria = given as secondary to scarlatina.
Enteric = traced to imported case.
Kidney Disease = 1 followed childbirth; 1 a visitor; 1 acute nephritis.

[a] Approximate average.

Of the total number of deaths in 20 years, more than half occurred in persons over 65 years of age, and infants, or were accidental.

The influenza cases occurred in those advanced in life, except one case of 15 years of age.

Influenza, when it does occur here, assumes, as a rule, a mild form.

Pneumonia in the greater number of cases is given only as a secondary cause, and apparently not due to climatic effects. Pleurisy is very rare.

I attribute the infrequency of influenza, pneumonia, and pleurisy to the absence of harsh winds in the winter and spring.

The number of cases of phthisis is probably due to the habits, diet, and employment of many of the working class, a great number being miners (lead and zinc) and quarrymen : their diet chiefly tea and bacon, their houses badly ventilated.

However, phthisis appears to be decreasing here, as elsewhere (1881 to 1890, deaths 23 ; 1891 to 1900, deaths 14).

The number of accidents appears large for a country village ; but they are caused chiefly by the hazardous nature of the work in the mines and quarries.

28 deaths occurred in octogenarians, and 4 in nonogenarians.

Taking into account the mildness of the climate, borne out by the thermometer, the absence of catarrhal effects, the fact of geraniums and begonias blooming in the open air in November, and roses in December, the deaths occurring largely in old persons and infants—the age of these latter being in several cases measured by hours, and even by minutes, the number of deaths due either directly or indirectly to the quarries and mines, my personal experience of benefit derived from a residence here, as well as my observations of patients who have rapidly improved on a comparatively short stay here, I think I am justified in calling attention to the hitherto very much neglected benefits of Bettws-y-Coed as a Health Resort.

Anyone who finds it relaxing may in a few minutes reach the breezy hills ; and the months which may perhaps be somewhat relaxing are June, July, and August, which are at present the months when visitors principally come here.

PART II.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

The Johns Hopkins Hospital Reports. Vol. X. Nos. 3, 4, 5. Baltimore: The Johns Hopkins Press. 1902.

In this number of the Reports four papers are contained. The first is by Dr. Dorothy M. Reed "On the Pathological Changes in Hodgkin's Disease, with Especial Reference to its Relation to Tuberculosis." The writer has had the opportunity of examining eight cases, whose clinical histories, together with the details of the *post-mortem* examinations, are carefully recorded. The following are the conclusions come to :—

"1. We should limit the term Hodgkin's Disease to designate a clinical and pathological entity, the main features of which are painless progressive glandular enlargements, usually starting in the cervical region, without the blood changes of leukæmia.

"2. The growth presents a specific histological picture, not a simple hyperplasia, but changes suggesting a chronic inflammatory process.

"3. The microscopical examination is sufficient for the diagnosis. Animal inoculation may confirm the decision by its negative results.

"4. Eosinophiles are usually present in great numbers in such growths, but not invariably. Their presence strengthens the diagnosis.

"5. The pathological agent is as yet undiscovered. Tuberculosis has no direct relation to the subject."

This paper is illustrated by four good plates.

The second paper on "Diabetes Insipidus," by Thomas B. Futcher, M.B., gives a record of five cases of this disease. They were all males, aged from 25 to 44. The longest duration of the disease was 10 years. In all thirst was the first symptom noticed. Four gave evidence of marked cerebral disturbance. In three of these and in the remaining case the knee-jerks were exaggerated. In the other it was diminished.

There was no marked disturbance in the metabolic functions. One case added 49 grains of nitrogen to his body with very slight loss of weight. Since the nitrogen in the urine depends on the nature of the food, the old division of cases of diabetes insipidus into hydruria, azoturia, and anazoturia must be given up. Clinically the cases come under two heads:— (1) The primary or idiopathic cases, in which there is no evident organic basis for the disease; (2) the secondary or symptomatic cases, attributable to definite organic changes either of the nervous system or abdominal viscera, or to physical disturbances, &c. There are some cases on the borderline in which it is difficult to decide in which group they should be placed.

Experiments on animals have given much information as to the nervous lesions which are capable of causing temporary or permanent polyuria. In men, tumours involving the medulla and floor of the fourth ventricle, cerebral hæmorrhages, and basilar meningitis are the commonest organic lesions causing the disease. Cerebral syphilis is apparently the cause in a larger number of cases than is generally supposed, the lesion most frequently being a syphilitic basilar meningitis.

The disease is a rare one. Out of 356,637 cases treated at Johns Hopkins there were only 4 of diabetes insipidus. The nature of the disease is uncertain. There is some nervous influence causing vaso-motor disturbance of the kidneys. Enlargement and congestion of these organs is the most frequent anatomical change found. The prognosis is naturally better in the idiopathic than in the symptomatic cases. Treatment is unsatisfactory. Antisyphilitic treatment sometimes, but not always, causes an improvement in the general health, and a diminution of the symptoms.

The third paper, by Drs. W. T. Howard, jun., and R. G. Perkins, is entitled "Observations on the Origin and Occurrence of Cells with Eosinophile Granulations in Normal and Pathological Tissues." The authors give the results of the examination of a very large number of pathological and normal tissues. They describe the cells found and discuss the origin of the eosinophiles and the paths by which they reach the tissues. The work is careful and laborious, but

the true import of the eosinophile cells seems to be as yet undiscovered.

The fourth paper is by Dr. Frank W. Lynch, on "Placental Transmission, with a Report of a case during Typhoid Fever." This is a work of very great interest and importance. As a result of his own observation and of a study of the literature the author draws the following conclusions :—

"1. The typhoid bacillus may pass from the mother to the child *in utero*.

"2. The resulting disease is a fœtal septicæmia.

"3. In cases of placental transmission there are generally placental lesions of a hæmorrhagic type.

"4. The child dies either *in utero* or soon after birth. There is no evidence that the fœtus may survive the infection *in utero*.

"5. Placental transmission is not the rule in typhoid.

"6. The Widal is not always given with fœtal blood, even though placental transmission be proven. Where present it cannot be determined whether the agglutinating substances result from the presence of the typhoid bacilli, or whether they have filtered through the placenta from the mother's blood.

"7. The agglutinating substances may be transmitted through the milk of a typhoid mother to the nursling. The reaction in the nursling's blood is but transient, and is always weaker than that of the mother's."

A list of 144 papers bearing on the subject of transmission is appended.

Diagnosis by Means of the Blood. Illustrated by 154 photo-micrographs of specimens of blood, as observed in general practice, showing products that are found in definite diseases. By Robert Lincoln Watkin, M.D. London: Sampson Low, Marston & Co. 1902. Pp. 388.

The object of this book is to show that the readiest and most certain mode of recognising a disease is to examine a specimen of freshly-drawn blood with a one-sixth inch lens. Indeed, this method of examination makes all others unnecessary. "I wish to say that when patients are sent to me by physicians

I seldom make a physical examination of the chest unless requested. My chief interest is in the appearance of the blood, and not in general physical examinations. The blood showed at once that the case was one of tuberculosis of the lungs."

Our readers will be interested to know the grounds on which this rapid diagnosis was made. It is stated that in tubercular subjects a "granular matter" exists in the blood; this exudes and forms the tubercles; the bacillus is merely an accidental concomitant. Now, what is this "granular matter?" We will quote the author that there may be no mistake:—"Some physicians have called them small corpuscles. Yet they do not resemble corpuscles; others say broken down red cells of the blood. *Bizzozero called them blood platelets or plaques.*"[a] "These granules in the blood are the hæmatoblasts of Hayem, the yeast of Salisbury, and the granules of Bayle." They are said to exist in the blood months, and sometimes years, before the tubercle bacillus enters the system. This we can readily believe, as they are a normal constituent of the blood, and are to be seen in every well-made preparation of healthy blood. But we may say here that the author does not seem very often to have seen a well-made preparation if we may judge from the photographs, which, with very few exceptions, are made from preparations so bad that it would be futile to draw any conclusions from them. While, then, Dr. Watkin diagnosticates tuberculosis from the presence of a perfectly normal constituent in the blood, he detects rheumatism by finding a network of fibrin in his preparations, and he actually maintains that the fibrinous network exists in the circulating blood of normal as well as of diseased subjects. In health, he says, "it is composed of fine short filaments rather closely packed and resembling a spider's web. It pervades the entire arterio-venous system with its invisible network, existing in the brain, the lungs, the heart, the stomach; spreading through every organ and capillary of the body, ever circulating and performing its function, which is as distinctive and as essential as that of the red or the white corpuscle. Thickened fibrin is one of the pathological conditions of the blood. It is this

[a] The italics in the quotation are our own.

thickened fibrin which collects the various crystals and insoluble particles that pathologically exist in this ceaseless river of the system as it splashes its contents against some sensitive neuron or its dendrite, and finally deposits them on the valves of the heart, or swashes its ingredients into some non-anastamosing (*sic*) vessel or capillary, or into some already painful joint. If the former deposit occurs in sufficient quantity, we have valvular disease of the heart ; if the latter, it is rheumatism of the joints." "It is the contracting of this fibrin which causes the pain when a rheumatic is exposed to a draught, and it is its contraction on exposure to the air which makes it visible."

We think our readers will hardly care to hear more of the author's views, or to follow him through his account of the origin of the red corpuscles in man from the nuclei of the leucocytes, while in lizards the white cells arise from the nuclei of the red corpuscles ; to hear of his discovery of the germ of syphilis, or what he calls Crypta syphilitica ; or to learn the wonderful things he finds in the blood in other diseases. But, perhaps, we shall be excused if we quote one or two further passages as showing the kind of reasoning to be found in his work :—"In chemistry at the present time it has been found that former supposed elementary bodies are composed of several elements—the latest report being that hydrogen is a compound body. And *so applying this principle to medicine it may be that syphilis is an offshoot of leprosy.*" A mass of fibrin is described as found in blood "taken from the system of a living man." "This fibrin skein circulates through the blood as a comet courses through the solar system," which picturesque statement will not explain how the "skein" gets through the capillary blood-vessels. In the absolutely irrelevant chapter on the death of President M'Kinley, the insertion of which is, we think, a piece of gross bad taste, we read—"When the nervous energy in a man is exhausted, the result is just as bad as though his blood-vessels were empty. The preservation of the vitality in the human economy is to-day not appreciated by the majority of men and women. This energy can leak from its channels in the body in many ways, the same as steam can leak from the boiler or cylinder of the steam engine.

If you shoot a boiler full of holes there will be no steam left to make the engine go; and so M'Kinley was shot, and his already weak vital system was drained still more." An injury to the pneumogastric nerve is said to "shut off one of the main channels through which this energy travels in going from the head to the feet." Indeed there is not a page, scarcely a sentence, in the book which is not open to the gravest criticism. As to the illustrations, which are so numerous as to justify the author in calling his work a picture-book, we have already said that, with few exceptions, they represent badly-made preparations, in which the corpuscles are so crowded together as to make it impossible to study their details. Many of the appearances described as seen in them cannot be recognised, and others are manifestly wrongly interpreted. The text is full of typographical errors. Thus we have "leucoyte" for "leucocyte," Alhanasius" for "Athanasius," "diphtheretic" for "diphtheritic," "Hellier" for "Hallier," "xglophagan" for "xylophaga," "nucleii" for "nuclei," "hemato-poetic" for "hæmato-poietic," &c., &c.

We can scarcely believe that the author seriously thinks that his work will meet with acceptance from the medical profession, even from its most credulous and ignorant members; but the book is one which might catch the fancy of the general public who are attracted by bold statements, generally the more so the more absurd they are. Inserted in the volume we find a slip containing a review, the source of which is not given. The concluding paragraph runs as follows:—"The work is unique in its style and arrangement, and will prove of the utmost value to the laboratory pathologist, to the practical doctor, and to the student of medicine. *It is, moreover, sufficiently clear and untechnical to be both interesting and instructive to the educated general reader.*"

In our opinion it is one of the worst books that it has ever been our misfortune to read.

Von der Nervenzelle und der Zelle im Allgemeinen. Von PAUL KRONTHAL. Jena: Gustav Fischer. 1902. Pp. 274.

IN this work the author puts forward the view that the nerve cells are formed from aggregations of leucocytes which have

become entangled in the network of non-medullated fibres. He holds that these cells originate nothing, but serve to hold together bundles of fibres by a conducting medium, so that an impulse arriving by one thread may be transmitted to several, just as would be the case with a number of copper wires not touching, but at one point all passing through a piece of wet sponge. A current of electricity passing along one wire would, when it reached the sponge, be distributed to all the other wires passing through the latter.

The second and much the longest part of the work treats of the cell in general. The cell is, like everything that exists, only a part of Nature, which cannot exist and must not be thought of as existing apart from the whole of which it is a part. The form, function and life of the cell depend on the forces which act on it. The cell is consequently the expression of forces. Here we attain the limit of human investigation, since we do not know what force is.

The cell is an organism, biologically indivisible, although composed of organs, capable of maintaining itself or of multiplication. In all this it differs from the nerve cell, which is not an organism, is formed by the coalescence of other cells, and has no power of maintaining itself or of multiplication. Since the nerve cell originates nothing there can be no free or spontaneous thought (*kein freies Denken*). All psychical processes are the outcome of two factors which always act together—firstly, from the periphery, which is continuously exposed to the action of forces, stimuli are always reaching the central cells, which on their part transmit in a purely passive way these stimuli to centrifugal paths; secondly, these cells are continually forming and undergoing destruction, and, in consequence, there is an infinite variation in the paths followed by the nervous impulses from periphery back again to periphery. Both these factors are completely withdrawn from the influence of the individual himself.

Since all men are composed of the same matter, and exposed to the same forces, all men must resemble one another physically and psychically. The differences in thought, perception, and feeling are not greater than those in the shape of the face, length of limbs, &c., and are minimal as compared

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with the whole of thought, perception, and feeling, which is the same in all men. Our thought is consequently not free, and if our actions are the outcome of our thoughts there can be no free will.

It would be unjust to the author to attempt within our limits to give an analysis of this remarkable book. It deals with a great variety of topics—life and death, free will, heredity, spontaneous generation, the origin of tumours, as well as with the cell as usually treated of. The matter is everywhere interesting and suggestive, and although we are not prepared to follow the writer in all his speculations, we can recommend the work to the attention of all those who take an interest in questions of general physiology.

The volume is admirably brought out as regards print and paper. It is illustrated by six chromo-lithographic and three helio-lithographic plates, containing numerous well-executed figures, and there are twenty-seven figures in the text. A valuable list of cytological literature and a good index enhance the value of the work.

The Work of the Digestive Glands. Lectures by PROFESSOR J. P. PAWLOW. Translated into English by W. H. THOMPSON, M.D., M.Ch., F.R.C.S. (Eng.). Illustrated. London: Charles Griffin & Co. 1902. Pp. 196.

THE results which are recorded in these lectures are the outcome of the united labour of all the workers in the Physiological Department of the Institute for Experimental Medicine in St. Petersburg. The work was designed, directed, and in greater part carried out by Professor Pawlow, the distinguished Director of the Department. But although emanating from a physiological laboratory, these lectures are in the highest degree practical. They were addressed to an audience of medical men; the volume is dedicated to the memory of an eminent physician, and the translation was undertaken with the object of placing the matter within easy reach of every English-speaking medical man. We would, therefore, in the strongest terms, recommend the work to the serious attention of every practising physician by whom the conclusions must

be tested on the human subject and their universality confirmed or the reverse.

The experiments on which these conclusions are founded were made on dogs. They are of the most ingenious design, and in many cases of difficult execution. They consist in making fistulæ into the œsophagus, so that the animals may taste, chew, and swallow food, which, however, never reaches the stomach; in making fistulæ into the stomach, pancreatic duct, gall duct, intestine, salivary ducts; and in the separation from the stomach of a portion which is made to pour its secretion out on the surface, as in the celebrated experiment of Heidenhain, but with this all-important difference, that while Heidenhain divided the nerves going to his diverticulum, Pawlow preserves them intact.

These experiments could be carried out successfully only by the strictest antiseptic methods. In the Russian laboratory there is a most complete and perfect surgical department which makes this possible, and the author calls attention to the want in most laboratories of this most essential part of their equipment.

We cannot more fully describe the details of the operative procedures, nor do we purpose giving an analysis of the work. This, to be of any use, would far exceed the limits at our disposal, but we shall confine ourselves to noticing the main conclusions arrived at, and to giving a few examples of the facts on which these conclusions rest.

The main ideas are :—

Firstly—That the action of the digestive glands is purposive, that is, the secretions, in amount and composition, are not always the same, but that they vary according to the nature of the food to be acted on, and always in such a way as to be most suitable for the work they have to do.

Secondly—That psychical impressions, more particularly desire for food, or appetite, is all-important in calling out the secretions. That the secretions are the result of the desire, and not the appetite the result of the activity of the glands.

Thirdly—That the nerves of the stomach and intestines which act reflexly on the glands are not capable of being called into action indifferently by all kinds of stimuli, but that the effective stimulus is specific and different for the different nerves.

Fourthly—That there are inhibitory as well as excitor nerves for the digestive glands.

As examples we may adduce the experiments on the pancreatic fluid with a diet of bread, meat, and milk, respectively. The greatest amount of proteolytic ferment is found on a diet of milk, less on bread, least on flesh. On a diet of bread the juice is very poor in fat splitting ferment, but on a milk diet this ferment is abundant, and with meat it is in intermediate amount; while the most amylolytic ferment is found on a bread diet, less on milk, and least on flesh.

The centrifugal nerves to the stomach and pancreas run in the vagus. If "sham feeding" be carried out—that is, if the animal gets food which falls out of an œsophageal fistula and never reaches the stomach—the glands of the stomach, and, to a less degree, the pancreas, after a latent period begin to secrete actively. The psychical stimuli which excite these secretions run in the vagi, and if these nerves be cut, even although the animal may remain in perfect health, the sham feeding calls out no secretion. In the same nerves run the inhibitory fibres for the glands. While sham feeding with food calls out an abundant secretion of gastric juice other stimuli to the mouth, acids, salines, bitters, pepper, mustard, mechanical stimulation, have no effect. It must be therefore "the eager desire for food, and the feeling of satisfaction and contentment derived from its enjoyment," which call out the secretion in sham feeding, not the chemical or mechanical stimulation of the mouth.

Mechanical stimuli directly applied to the interior of the stomach, as rubbing with a glass rod, stroking with a feather, blowing in sand, distension with an inflated India-rubber ball, call out no secretion. Water does call out secretion, but neither hydrochloric acid nor sodium chloride when dissolved in the water increases the secretion, while sodium bicarbonate manifests an inhibitory influence. Besides water, meat extract, milk, and solutions of gelatine are effective. Starch and sugar directly introduced into the stomach gave negative results, as did meat after prolonged extraction with boiling water, bread, and egg albumin.

The excitants of the pancreas are quite different from those of the stomach. Foremost among them comes acid, when

introduced into the duodenum; starch does not increase the quantity of the secretion, but makes it richer in amylolytic ferment; while fat, which inhibits gastric secretion, increases the flow of pancreatic juice and makes it richer in fat splitting ferment. Water excites the secretion, but neutral and alkaline salts diminish it.

In the eighth lecture it is shown how the results of experiments agree with the customs derived from instinct, and how they may guide the physician in the dietetic treatment of his cases.

The last lecture is supplementary to the others, and delivered five years later. It gives the results of further researches on the salivary secretion, and on the bile and succus entericus, and on the movements of the stomach. It also emphasises the close connection between physiology, pathology, and therapeutics, and points out that the only path along which we may hope to advance securely in the prosecution of these sciences is that of experiment. Indeed these lectures may be pointed to as a sufficient answer to the question—What has practical medicine gained by experiments on animals?

We have possibly said enough to show that this volume abounds with information which will be of inestimable service to every medical man in the diagnosis and treatment of a difficult class of diseases hitherto most unsatisfactory to treat; but more than that, from almost every page suggestions as to dietetics may be derived which will be applicable to all cases which he may be called on to attend. Thanks to Professor Thompson's excellent translation, the work is now accessible to all English-speaking medical men, and will doubtless receive from them the attention and recognition it deserves.

Ligaments: Their Nature and Morphology. By J. Bland-Sutton. Third Edition. London: H. K. Lewis. 1902. Post 8vo. Pp. viii and 112.

The fact that this little text-book on Ligaments has so soon reached a third edition is sufficient proof that its value has been definitely appreciated. We are glad to have an opportunity of adding our testimony in its favour. It seems to us to have been conceived and delivered to the world in a

thoroughly broad-minded and philosophic medium of thought. This is refreshing to contemplate, as we have always felt that the ligaments deserve a good deal more of that kind of treatment than they usually receive. We would call the attention of our readers to the interest and value of the information given (pp. 66 and 67) on the subject of the great *pons asinorum* of syndesmology, the ligamentum teres of the hip-joint. The author defends the thesis that it is (was) a part of the pectineus muscle, detached by "skeletal modifications."

We have perused this small volume with interest and mental profit, and cordially recommend it to all *thinking* students of anatomy.

Treatise on Diseases of the Skin; for the use of Advanced Students and Practitioners. By HENRY W. STELWAGON, M.D., Ph.D. Philadelphia and London: W. B. Saunders and Co. 1902. Pp. 1115.

Two years ago the 5th edition of Hyde and Montgomery's excellent Treatise on Diseases of the Skin appeared, and we have now to notice a formidable competitor in the same field. At first sight another American treatise on dermatology might appear superfluous, but a closer acquaintance with Dr. Stelwagon's book fully justifies its publication. The general arrangement and plan of both works is essentially the same. Dr. Stelwagon has, in our judgment, admirably succeeded in his task, and has produced a remarkably complete and practical work, which we can strongly recommend to the attention of our readers.

The literary style of the book is good, and is not marred by Americanisms which are apt to grate upon European taste. We can especially commend the sections devoted to treatment. They are written in a sensible and discriminating manner; and the chapter on syphilis and its management may be singled out for particular commendation. The text is adorned by 220 illustrations, mostly photographs of merit, and there are 26 full-page lithographic and half-tone plates selected from Mračeks Hand Atlases of Diseases of the Skin and Syphilis.

Every practitioner who desires to possess an exhaustive and thoroughly practical manual of diseases of the skin, well up-to-date, could not do better than add this volume to his library.

Atlas and Epitome of Abdominal Hernias. By Dr. Georg Sultan, First Assistant in the Surgical Clinic in Göttingen, Prussia. Authorized translation from the German. Edited by William B. Coley, M.D.; Clinical Lecturer on Surgery, Columbia University (College of Physicians and Surgeons); Surgeon to the General Memoria Hospital; Assistant Surgeon to the Hospital for Ruptured and Crippled, New York City. With 119 Illustrations, 36 of them in colours. Philadelphia and London: W. B. Saunders & Company. 1902. Pp. 227.

The present volume is an admirable addition to the series of medical hand-atlases which have been placed before the Profession during the past few years. The descriptions of the various forms of hernia commonly met with in practice, as well as of those much rarer varieties occasionally seen, are clear and concise. The beautifully executed illustrations greatly add to the value of the descriptions. The operative procedures described and illustrated for the radical cure of inguinal hernia are those of Bassini, Kocher, and Macewen; while those described and illustrated for the radical cure of femoral hernia are the operations of Bassini and Kocher. It is to be regretted that there is no complete description given of any operative measure for the radical cure of umbilical hernia, a defect which we should like to see remedied in the next edition.

We can confidently recommend the volume to the student or practitioner.

Studies in Heterogenesis.[a] By H. Charlton Bastian, M.A., M.D., F.R.S. Second Part. Williams & Norgate, 1902. Pp. 86 + vii.

In this part of his work Dr. Bastian describes, first, the pro-

[a] For notice of first part of this work see Dublin Journal of Medical Science, Feb., 1902. P. 117.

duction of flagellate monads, amœbæ, fungus germs, and ciliated infusoria from the pellicle which forms on the surface of hay and other organic infusions. He looks on the glœal material formed around bacteria in those aggregations of them known as zooglœa as "incipient protoplasm, or at all events a material readily convertible into protoplasm." In the case of the ciliated infusoria he points out that they develop in filtered infusions; that they are not known to be reproduced by any very minute particles having the nature of spores or germs; that when they first appear they are nearly full-sized, and are always preceded in the pellicle by encysted matrices from which they emerge. Since these matrices could not have passed through the filter it must be concluded that they have been formed in the pellicle itself.

In subsequent chapters we find an account of the evolution of Vorticellæ in and from a pellicle largely composed of Spirilla; of the transformation of Encysted Euglenæ into Ciliated Infusoria; of the Segmentation of some encysted Amœbæ, and the Conversion of the Segments into Ciliated Infusoria, or their resolution into Monads; of the transformation of the substance of the eggs of Rotifers of the genus Callidina into a new kind of Ciliate belonging to the genus Glaucoma; of the transformation, in the course of three or four days, of the entire contents of the egg of Hydatina Senta into a large Ciliated Infusorium belonging to the genus Otostoma; and of the transformation of the substance of the eggs of a Tardigrade (Macrobiotus) into Ciliated Infusoria.

The text is illustrated by 244 photo-micrographs, showing the several appearances on which the author founds his conclusions.

The entire work is evidently the outcome of much patient and conscientious labour, but whether the conclusions reached are just, or whether Dr. Bastian, like so many of his predecessors in this line of study, has fallen into error, subsequent research must show. At present scientific opinion is decidedly against him, and he complains of the treatment which he has received at the hands of the Royal Society and several Continental learned bodies who have

refused even to examine his work. This work cannot, however, remain fruitless. If it is right it will revolutionise a great deal of our biological views; if it is wrong it will deter subsequent workers from following an *ignis fatuus*.

The Journal of Obstetrics and Gynæcology of the British Empire. Vol. I.

The volume before us constitutes the first twelve monthly numbers of a Journal that has for its object the representation of British thought in this special department of surgery throughout the entire Empire. In addition to this—its primary object—it also affords a short *résumé* of current literature selected from foreign sources.

The introductory article is from the pen of Dr. J. Cullingworth. In it he analyses one hundred cases of uterine fibromyomata, in which the conditions of the tumours and the complications to which they had given rise were verified by operation.

Obstetrics at the beginning of the Twentieth Century is the title of a rather scrappy contribution by Dr. Berry Hart. The latter author is responsible for three other articles to the volume, all of them of greater value than this one.

Milne Murray records a case of spontaneous rupture of the uterus at the commencement of labour. We cannot but think that this and other similar cases which have been reported are in reality the re-opening with, perhaps, extension of a uterine rupture sustained in a former labour.

A scholarly treatise by Dr. J. Henderson on the maternal blood, and an excellent paper by Eden on the toxæmic theory of pregnancy, will each well repay a close perusal.

Dr. Clarence Webster writes on two specimens of placenta prævia, and illustrates his paper by plates taken from his valuable section.

Dr. G. F. Blacker's paper on vaporisation of the uterus will be found most instructive.

Did space permit, attention could be called to innumerable contributions of no less importance than those cited, and the Journal is greatly to be congratulated on the eminence of its contributors.

When we turn to the portions of these monthly journals set apart for selections and translations from current literature, a word of advice may not be out of place. It is to this section that a publication such as this must look for its chief source of popularity amongst the reading public. By it the Journal must stand or fall. The fact cannot be denied that there are many serious competitors in this department, not alone from English, but likewise from American sources.

It is therefore a vital matter for the Journal of British Authors not to be merely good. In this respect it must be the very best.

It is unreasonable to expect that the average man has either time or inclination to multiply the number of his special journals, and it does not require much foresight to perceive that his choice will eventually fall on that which keeps him abreast of the latest foreign opinion in the most efficient manner.

Surgical Ward Work and Nursing: A Handbook for Junior Students of Medicine and Nurses. By ALEXANDER MILES, M.D., C.M., F.R.C.S. Edin. Second Edition. London: The Scientific Press, Limited. 1899. 8vo. Pp. viii. + 288.

IT has been, on a former occasion, our privilege to review and to recommend this useful little book to those for whom it is intended. It is, therefore, with great pleasure that we receive a copy of the second edition. The scope of its pages embraces matters which, as the author remarks, are not to be found in treatises on surgery in general, and to which on entering the profession the student finds himself, as a rule, a complete stranger. Such are—the names and various forms of the different instruments used in surgery; articles on bandaging. &c.; and a whole host of small details which would otherwise never occur, in all probability, to the mind of a beginner. The chief additions are in those sections dealing with aseptic procedures in surgical operations, and with the after-treatment of operation cases. The chapter on the antiseptic spray has been omitted. The illustrations, at which before we were somewhat apt to cavil, have been to a large extent replaced,

and several photographs have been introduced, thus largely increasing the utility of the work. We have again much pleasure in bringing before the notice of our readers Mr. Miles's book, by the perusal of which they are certain to derive much information of a practical and beneficial nature.

We tender to the author an apology for the delay which has occurred in connection with the publication of this notice of the second edition of his book.

Diseases of the Pancreas and their Surgical Treatment. By A. W. Mayo Robson, F.R.C.S.; Senior Surgeon, Leeds General Infirmary; Emeritus Professor of Surgery, Yorkshire College, Victoria University; Member of Council and Hunterian Professor, Royal College of Surgeons of England; Honorary President, Surgical Section, International Medical Congress, 1900; and B. G. A. Moynihan, M.S. (Lond.), F.R.C.S.; Assistant Surgeon, Leeds General Infirmary; Consulting Surgeon to the Skipton Hospital and to the Mirfield Memorial Hospital; Arris and Gale Lecturer and Member of the Board of Examiners in Anatomy for the Fellowship, Royal College of Surgeons of England. Illustrated. Philadelphia and London: W. B. Saunders & Co. 1902. Pp. 293.

The present volume is dedicated to the Surgeons of America, in cordial recognition of their work, and took its origin from the papers of Mr. Mayo Robson, read before the London Polyclinic in June, 1900, on the relation of chronic pancreatitis to cholelithiasis, and introductory to the discussion on diseases of the pancreas at the International Medical Congress at Paris, as well as his paper on pancreatitis, read before the American Surgical Association in May, 1901. In the production of the volume Mr. Moynihan has collaborated with Mr. Mayo Robson, with the result that there is now placed before the profession an exhaustive treatise on diseases of the pancreas, embodying their own experience as well as giving an epitome of the writing and experience of other distinguished observers and workers.

Chapter I. is devoted to the anatomy of the pancreas, while Chapter II. gives an interesting and instructive

account of the experimental work on the functions of the pancreas.

Chapter III. deals with injuries of the organ. Short accounts are given of fourteen cases of injury of the pancreas, all of which proved fatal. Most of these were associated with injuries to other organs, but the cases of rupture of the pancreas, apart from other abdominal injuries, are those reported by Jann, Wilks & Moxon, and Wagstaff. Other cases are reported in which the injury was not so severe, and in which recovery followed operative interference. "In these cases of less extensive rupture, involving the overlying and adherent peritoneum, the symptoms and signs are those of effusion into the lesser sac of peritoneum." . . . "Experimental work has shown that wounds of the pancreas can be sutured, and that healing speedily takes place."

In Chapter VI., on pancreatitis in general, will be found much food for reflection, and much to suggest a line along which experimental research might with advantage be directed. There is still much doubt as to the causation of "fat necrosis," which is so widespread in some cases of acute pancreatitis, while in others it is only met with to a limited extent, and in other cases still is conspicuous by its absence. Then again the very severe hæmorrhage met with after operation in cases of jaundice associated with disease of the pancreas as compared with that following operations performed on patients suffering from jaundice unassociated with pancreatic trouble, suggests that its causation should be sought for in the pancreatic disorder. The authors suggest that this hæmorrhagic tendency may possibly be due to the glycerine set free in the tissues by the fat necrosis. In support of this we have the well-known fact that hæmorrhage, and especially hæmaturia, occurs as one of the phenomena of glycerine poisoning. The pertinent question—"Can it be due to something absorbed from the pancreas into the blood, which only acts when the absorption has been occurring over a prolonged period of time?"—yet remains to be answered.

In Chapter V. will be found an account of acute pancreatitis, its symptoms, diagnosis, pathology and treatment. The marked tendency to collapse and shock met with in this disease is attributed to the close relation of the pancreas to the

solar plexus. Many cases illustrative of acute gangrenous, hæmorrhagic, and suppurative pancreatitis are detailed, a study of which will largely assist the reader in arriving at a diagnosis of this most difficult of abdominal lesions to diagnosticate. The treatment of acute pancreatitis is that of exploring from the front, and then, after establishing the diagnosis, draining from the back, so as to evacuate the septic material, secure free drainage, and arrest hæmorrhage which may lead to disintegration and necrosis of the organ.

Chapter VII. tells us everything that is known about chronic pancreatitis, a number of illustrative and instructive cases being appended.

Chapter IX. on pancreatic cysts occupies about one-fourth of the book. The classification of cysts adopted is—

I. Retention cysts.
II. Proliferation—cystic adenoma,
cystic epithelioma.
III. Hydatid.
IV. Congenital cystic disease.
V. Hæmorrhagic cysts.
VI. Pseudo-cysts.

Each variety is fully described, and the chapter concludes with an account of some cases under the author's care, all of which, with one exception, made a satisfactory recovery after operation.

The closing chapter is devoted to a consideration of the new growths met with in the pancreas.

The errors in the book are few indeed. On page 220, in speaking about pseudo-cysts the authors state that they may be found between the layers of the transverse colon, &c. Of course this should read transverse meso-colon. On page 253, the word "intestinal," seven lines from the bottom of the page, should read "interstitial." The word "rigor" is invariably "rigour." We do not say it is absolutely wrong, but in modern English we are not accustomed to see the word "rigour" used in this sense.

The volume is one which should be in the possession of every hospital surgeon. We heartily congratulate the authors on their success. The type, paper and binding are all that could be desired.

A Manual of Medicine. Edited by W. H. ALLCHIN, M.D. Lond., F.R.C.P., F.R.S. Ed. Vol. IV. Diseases of the Respiratory and of the Circulatory Systems. London: Macmillan & Co., Ltd. New York: The Macmillan Co. 1902.

OF the three preceding volumes of Dr. Allchin's Manual of Medicine it has been a pleasing duty to speak in terms of laudation. The 4th volume, which is now on the shelves of the booksellers, is in every way worthy to join with its predecessors, and should occupy a position for ready reference in the study of every medical practitioner who desires to have a concise statement on modern views as applied to the respiratory and circulatory systems. It is to teachers of clinical medicine, however, that the text-book now under review will appeal most strongly—for anatomy, physiology, and pathology form an integral part of the contents of the work, and what teacher can have any pretence of making his clinical instruction of real value who omits to lead the minds of his students from the normal to the abnormal in the cases which seek for hospital treatment? It is not possible for a busy clinician to keep himself thoroughly versed in the recent advances of physiology and pathology as found in special text-books on these subjects, nor can he hope to escape from the rustiness which inevitably follows the absence of a particular study of anatomy and physiology; but we venture to think that the majority of clinical teachers will find in the articles introductory to the various diseases dealt with by the contributors to Dr. Allchin's manual an epitome which should satisfactorily serve to refresh their memories on the matter above mentioned.

To the general practitioner the symptomatology, prognosis and treatment of disease are the points of greatest significance, so that in his case the manual is probably in some respects unnecessarily instructive. At the same time it may be pointed out that diagnosis, prognosis and treatment will be found to have received their fair share of attention, and indeed it may be mentioned that from the first the aim of the editor has been "to present such a picture of the several maladies as will conform to the appearances detected at the bedside and enable the observer rationally to administer such treatment as our art affords."

It is unnecessary, therefore, in reviewing the work to go into a detailed criticism of the subject matter of each article and point out omissions that must, as a matter of course, have occurred; but it is quite sufficient to name the several contributors and point out the nature of their contributions. Dr. Allchin himself furnishes the chapters on "Disorders of the Diaphragm" and on "Dropsy." He has produced also two coloured plates by Professor Thane, showing, by means of diagrams, the relations of the thoracic viscera, &c., to the skeleton, as well as a table adapted from Quain's Anatomy "showing the levels of the various structures in the thorax in relation to the spines and bodies of the vertebræ."

Dr. Lewis Smith, Physician to the Poplar Hospital, has been entrusted with the "Disorders of the Upper Respiratory Tract," of which the chapters on epistaxis, adenoids, and hay fever will be read with most interest.

"Diseases of the Lower Respiratory Tract" are dealt with in a most excellent manner by Dr. Hector Mackenzie. The chapters on General Symptomatology and on Physical Examination are concisely and methodically written, and the same may be said of the articles pertaining to the various diseases of the lungs.

Dr. Francis De Haviland Hall contributes thirty pages on Diseases of the Pleura and Mediastinum.

Dr. Leonard Hill, Lecturer on Physiology in the London Hospital, writes very admirable articles on "the Physiology of Respiration" and "the Physiology of the Circulation."

And finally, Dr. J. Mitchell Bruce has proved himself well qualified to undertake the production of the important chapters dealing with Diseases of the Heart and Blood Vessels.

It is particularly on the treatment in disease of the heart that Dr. Mitchell Bruce excels in his writing. He dwells at considerable length on this most important matter. There is a short chapter devoted to the general treatment of (*a*) acute cardiac disease, (*b*) chronic cardiac disease, with compensation, (*c*) failing compensation and cardiac failure, and (*d*) chronic myocardial disease originating in insidious degeneration. But further than this he gives the treatment of the individual affection of the heart, and in every case a study of the principles and methods advocated by him will repay careful perusal.

The fifth, which is the final, volume of the series has been set apart for "Diseases of the Digestive System and of the Kidneys." The publication of this instalment will be looked for eagerly by the medical men and students who have already subscribed for the previous volumes.

It may be noted that the publishers have taken advantage of the production of the 4th volume to add a catalogue of their medical text-books, which extends over sixty odd pages, and therefore materially increases the size of the volume. This is a policy to be deprecated.

DIRECTORIES FOR 1903.

1. *Who's Who*, 1903. An Annual Biographical Dictionary. Fifty-fifth Year of Issue. London: Adam & Charles Black. 1903. 8vo. Pp. 1532.

2. *The Englishwoman's Year-Book and Directory*, 1903. Fifth Year of New Issue. Edited by Emily Janes, Organising Secretary to the National Union of Women Workers of Great Britain and Ireland. Twenty-third Year. London: Adam & Charles Black. 1903. 8vo. Pp. 340.

1. Messrs. A. & C. Black's "Who's Who" is so widely known and appreciated that it is not necessary for us to do more than announce the publication of the issue for 1903. The work, as heretofore, consists of two parts. But Part I. in the present edition has reached almost the vanishing point—a matter for very sincere regret. It now occupies only 4 out of the 1532 pages which make up the book. Two of the four pages contain information about the Royal Family. The remaining two pages record the deaths of well-known personages who passed away in the year ended September 30, 1902. In this list we notice the name of our much-lamented fellow-citizen, Mr. John Hatchell, whose death, however, occurred on August 27, 1901, not 1902, as printed in the "Obituary."

The "Biographies" are, as usual, full of interest, possessing, as they do, a strong personal tone. When we are told that every biography has been submitted for personal revision, and that this year's issue contains over 15,000 biographies,

the labour involved in the publication of such a book of reference becomes apparent. We have only to add that the medical profession receives due recognition in the pages of "Who's Who."

2. "The Englishwoman's Year-Book and Directory" for 1903 appears to be also a very useful work. In the words of the Editor, "it aims at giving some idea of the extent of women's work and interests, and some guidance to those who want to help their fellow-creatures, whether as individuals they live lives centered (*sic*) round their own home, or take a wider view of their opportunities and responsibilities."

We wish the publication every success in its beneficent work.

Verhandlungen des Vereins für innere Medicin in Berlin. Herausgegeben von dem Vorstande des Vereins. Jahrgang XXI. 1901-1902. Berlin. 1902. Pp. 502

The number and value of the papers contained in this volume, and the great variety of the subjects with which they deal, are signal proofs of the vitality of the celebrated Society whose transactions are here recorded. It would, of course, be impossible for us to give even the titles of all the communications here brought together. We may, however, notice briefly a few, taken very much at random. Several cases of acromegaly are reported by A. Fränkel and Stadelmann, and a valuable report on the changes in the pituitary body is given by Benda. In the four cases examined the changes were confined to the anterior or glandular lobe; the posterior or nervous lobe took no part in the tumour. In two cases the growth was purely adenomatous; in the other two it showed more or less evidence of malignant degeneration. In three of the cases the newly-formed gland cells were largely of the granular kind, which is believed to indicate a condition of activity. From this it is concluded that in acromegaly the pituitary gland is in a condition rather of increased than diminished activity as compared with its normal state. It may be added that Fränkel found no benefit to result from the administration of pituitary tabloids in his cases.

A paper by J. Hirschfeld, on Diabetes following accidents, gave rise to a very prolonged discussion, extending over several sittings. Stadelmann reports some interesting clinical and therapeutical observations on Phthisis. It has been frequently stated of late that in cases of this disease accompanied by high fever, and more particularly where the urine gives the diazo reaction, bacteria, chiefly staphylococci, are to be found in the blood. Stadelmann and his assistant, Lasker, examined 68 cases, and found bacteria (streptococci) only in one case. The condition must, therefore, be one of great rarity, and cannot be the cause of the fever of phthisis. Of the cases examined 26 gave the diazo reaction in the urine.

The diazo reaction has been looked on as a symptom of very bad omen in phthisis. In order to determine its value 152 cases were examined. From the results it is concluded that it has no value in diagnosis, but some prognostic importance. This is given only by its presence, for in 69 severe cases it was absent in 31, or from 40 to 50 per cent. When present it has value only if persistent, for many slight cases show it transitorily. If persistent even in apparently light cases it suggests a very guarded prognosis. Its occurrence, unless persistent, must not exclude a patient from a sanatorium, if the case appears otherwise suitable.

The presence of eosinophile cells in the sputum has been looked on as a good sign, and has been supposed to show that in the struggle between the bacilli and the organism the latter was getting the better. Stadelmann and F. Meyer examined 82 cases, 77 of which were unquestionably tubercular, and 5 doubtful. In only 15 cases (18 per cent.) of these were eosinophile cells found. Their presence bore no relation to the number of tubercle bacilli or to the course of the disease, nor was any increase of the cells observed during or after treatment by Koch's tuberculin. The conclusion is that eosinophile cells in the sputum of a phthisical patient are without prognostic value.

Valuable results are got in the sweating of phthisis by treatment by guacamphol, and in the pyrexia by treatment with pyramidon and its salts.

Kaminer, in a long and interesting paper, shows that pregnancy exerts an unfavourable influence on the course of phthisis, and that it is a distinct misfortune to a phthisical woman to get in the family way. He thinks that in many cases it is justifiable to induce abortion, as this operation is less injurious than a natural delivery at full time.

Strauss describes a clinical method for the quantitative determination of indican in the urine: and Bial gives a simplified and improved method for determining the presence of pentoses in the urine, which may be used clinically to distinguish these substances from diabetic sugar.

For the very many other valuable papers we must refer our readers to the volume itself.

Transactions of the Association of American Physicians. Sixteenth Session. Philadelphia: Printed for the Association. Pp. 738.

These valuable Transactions contain, as usual, matter of much interest and importance. Drs. Reed, Carroll, and Agramonte contribute an account of some remarkable work done in connection with Yellow Fever. By means of experiments on a number of United States soldiers, who volunteered for the purpose, they proved satisfactorily that the disease could be conveyed by hypodermic injection of the blood of patients suffering from the disease, and, more important still, that a mosquito (Culex Fasciatus) can convey the disease from the sick to the healthy. These experiments are referred to in many recent works on Medicine; it is interesting to have here an original report.

Drs. Billings and Henry furnish papers on Pernicious Anæmia. Acute Pancreatitis is treated by several members. Dr. Opie concludes that when a gall-stone is impacted in the common duodenal opening of the ducts of the liver and pancreas, bile enters the pancreas by way of the pancreatic duct and causes inflammation; experimental injections of bile into Wirsung's duct has the same effect. Injections of acids also cause hæmorrhagic pancreatitis and fat necrosis,

Dr. Edes has a careful paper on Slow Pulse and the Stokes-

Adams' Disease. There are several papers on the Acid-intoxication of Diabetic Coma.

These are merely some papers we have glanced at, but there are many others which will well repay perusal in this volume, which, in our opinion, is certainly one of the best of the volumes of "Transactions" which are annually published.

International Clinics. Volume II. Twelfth Series. 1902. London: J. B. Lippincott Co. Pp. 295.

Each volume of this series contains a miscellaneous collection of articles similar in nature and scope to many of the papers that appear in the weekly and monthly medical journals, divided under the headings of Therapeutics, Medicine, Surgery and Obstetrics.

Under the first head we have a paper by Prof. Lépine on the Treatment of Diabetes Mellitus, in which the author states that in some cases he finds (contrary to the generally received opinion) that saccharose is less injurious than starch, inasmuch as saccharose is in the alimentary canal converted as to half its weight into levulose, and it has been repeatedly found that levulose is better borne than glucose.

Prof. Finger writes at some length on the treatment of gonorrhœa.

Under the heading of Medicine Dr. Daniel carefully describes some cases of pancreatic cysts. Dr. Douglas discusses the cause of diabetic coma. Prof. Hemmeter writes on gastro-intestinal auto-intoxication.

In the section on Surgery Prof. Jonnesco, in a paper illustrated with notes and photographs of cases, advocates the resection of the cervical sympathetic for Graves's disease. Some of the photographs show much improvement after the operation. Dr. Gibbs records some remarkable recoveries from gunshot wounds of the central nervous system received during the late war in South Africa.

The work concludes with a review of some of Professor Pavlof's (or Pawlow's) work on the digestive glands.

PART III.

MEDICAL MISCELLANY

Reports, Transactions, and Scientific Intelligence.

THE CENSUS OF IRELAND. 1901.

The Registrar-General for Ireland, Mr. Robert E. Matheson, LL.D., has courteously presented the Editor of this Journal with Part II. of the Census of Ireland for the year 1901, being the General Report of the Census Commissioners, with illustrative maps and diagrams, tables, and appendix.

The Census Commissioners were the Registrar-General himself, Mr. T. J. Bellingham Brady, LL.D., Assistant Commissioner, Intermediate Education Board for Ireland, and Mr. Robert J. Brew, the Assistant Registrar-General. The General Report was presented to his Excellency George Henry Earl Cadogan, K.G., Lord Lieutenant General and General Governor of Ireland, on June 30, 1902, that is to say, within fifteen months of the date of Census Night, March 31, 1901.

Facts of interest to both statistician and physician abound in the pages of the General Report. It is, therefore, not necessary to offer any apology for transferring to the pages of this Journal a concise summary of the principal results of the Census.

The Report opens with an interesting account of the earlier attempts which had been made to ascertain the population of Ireland. The first attempt worthy of notice was that made by the celebrated Sir William Petty in the second half of the seventeenth century. His estimation, taken in the year 1672, gives a total of 1,100,000 souls. In 1731, a rough and unsatisfactory, because imperfect, Census was taken through the medium both of the Magistracy and of the Established Clergy. The population is stated to have been 2,010,221.

Subsequent estimations gave the following results :—

1754	..	..	..	2,372,634.
1767	..	..	..	2,544,276.
1777	..	..	..	2,690,556.
1785	..	..	..	2,845,932.
1788	..	..	..	4,040,000.
1791	..	..	..	4,206,612.
1805	..	..	.	5,395,456.

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DUBLIN - BELFAST, IRELAND.

The estimations for 1788 and 1791 are based on the returns of the Hearth-money Collectors, and are calculated on the average of six souls to a house. Accordingly, they do not count for much.

The first attempt to take an Official Census in this country was made in 1813, pursuant to an Act passed in 1812. Under this statute the supervision of the enumeration was entrusted to the Grand Juries of the several counties. This inquiry failed.

The Census of 1821 was taken under the supervision of the Magistrates at Quarter Sessions and the Assistant Barristers, and the results of this, the first authoritative and complete Irish Census, were presented to the public in 1823. A second enumeration of the people took place in 1831, and was subjected to examination and correction in 1834.

The Census of 1841 opened a new era in Irish Statistics. The Commission consisted of Messrs. W. Tighe Hamilton, Henry J. Brownrigg, and Captain (afterwards Sir) Thomas A. Larcom, R.E. It was then for the first time that the Ordnance Survey Maps were available, and a regularly organised police force—the Royal Irish Constabulary—at hand, from which a corps of enumerators could be selected. Many new lines of investigation were entered upon, including an inquiry into the deaths during the ten years ending June 6, 1841.

The Census of 1851 was taken under the superintendence of the then "Registrar-General of Marriages," Mr. William Donnelly, assisted by Dr. (afterwards Sir) William R. Wilde. The chief features of that enumeration were the School Census and a valuable Report on the Status of Disease. The latter, in addition to treating of the number of persons suffering from sickness, dealt with the deaf and dumb, the blind, the lunatic and idiotic, and the lame and decrepit. An interesting Table of cosmical phenomena, epizootics, famines and pestilences, in Ireland, extracted from the earliest published records, formed an attractive feature in this Report. It was compiled by the Assistant Commissioner, aided by two eminent Irish Scholars, Dr. O'Donovan and Mr. Eugene O'Curry, M.R.I.A.

The Census of 1861 was taken under the direction of the Registrar-General (Mr. Donnelly), acting as Chief Commissioner, with Dr. W. R. Wilde and Dr. G. W. Abraham as Assistant Commissioners. An inquiry was for the first time made into the Religious Professions of the people, and the Tables exhibited Education in connection with Religious Profession. The Report was included in five volumes, of which two dealt with Ages and Education.

two with Deaths and the Status of Disease ; while the fifth volume was devoted to the subjects of Religious Professions, Education and Occupations. A "General Report" completed the series of volumes.

In 1871, the *personnel* of the Commission was the same as in 1861. save that the Board consisted of three Commissioners. The Census volumes included two on Vital Statistics.

The Commissioners for taking the Census of 1881 were Dr. Thomas W. Grimshaw, Registrar-General ; Dr. G. W. Abraham, and Mr. Robert E. Matheson. Information relating to the occupations or social condition of the inhabitants of the Dublin Registration District was published for the first time. The Report also included a series of Tables showing the area and valuation of agricultural holdings.

In 1891, the Commissioners were Dr. Grimshaw, Registrar-General, who shortly afterwards received the Companionship of the Order of the Bath for his conspicuous services ; Dr. T. J. Bellingham Brady, and Mr. Robert E. Matheson.

The population of Ireland, according to the several Census Returns just mentioned, was as follows :—

Years	Males	Females	Total
1821 ..	3,341,926 ..	3,459,901 ..	6,801,827
1831 ..	3,794,880 ..	3,972,521 ..	7,767,401
1841 ..	4,019,376 ..	4,155,548 ..	8,175,124
1851 ..	3,190,630 ..	3,361,755 ..	6,552,385
1861 ..	2,837,370 ..	2,961,597 ..	5,798,967
1871 ..	2,639,753 ..	2,772,624 ..	5,412,377
1881 ..	2,533,277 ..	2,641,559 ..	5,174,836
1891 ..	2,318,953 ..	2,385,797 ..	4,704,750

The "high tide" of the population of Ireland occurred in the year 1845—just before the terrible Potato Famine. The estimated population in that year was 8,295,061 souls ; the males numbering 4,083,043, and the females 4,212,018. These figures were arrived at from the Irish Census Report of 1841 by taking the English average birth-rate of 1 in 31, and death-rate of 1 in 45, and deducting the annual emigration from Ireland according to the returns received from the Emigration Commissioners in England.

The recent Census of 1901 was taken under circumstances of peculiar difficulty owing to the entire re-arrangement of the territorial divisions of the country consequent on the passing of the Local Government (Ireland) Act of 1898. The warrant appointing the Census Commission was received on December

12, 1900, and the Commissioners held their first meeting on that date. The country was apportioned into 208 Enumeration Districts—202 officers of the Royal Irish Constabulary and 6 officers of the Dublin Metropolitan Police acted as Superintendents of Enumeration. Under the control of each Superintendent were a certain number of Enumerators, amounting altogether to 3,941—viz., 3,790 members of the Royal Irish Constabulary and 151 members of the Dublin Metropolitan Police.

The necessary forms and instructions were despatched to the Superintendents of Enumeration before March 11, 1901, the day fixed for the opening of the parcels and the commencement of the distribution of the forms. The distribution of the forms was completed on March 30, and the collection of the returns commenced on April 1. As in 1891, returns for every house in which there was a case of infectious disease were enclosed in specially prepared double sets of impervious covers, and forwarded to the Census Office, where they were disinfected. When the collection of the returns from his district was completed, each enumerator proceeded to make a summary of the results. On May 17, 1901, the Commissioners forwarded to His Majesty's Government, for presentation to Parliament, their Preliminary Report with an Abstract of the Enumerators' Summaries. The manuscript of the Census Book for County Carlow, the first of the series of County Books, was forwarded to the printer on July 24, 1901, and that Book was presented to His Excellency Earl Cadogan, K.G., on October 24, 1901, as the first instalment of the Census of 1901.

The following is a concise summary of the principal results of the Census :—

Persons.—The population of Ireland in 1901, including the Navy and Military serving in the country, was 4,458,775 (2,200,040 males and 2,258,735 females). In 1891 it had been 4,704,750 (2,318,953 males and 2,385,797 females). There was, therefore, in the ten years a decrease of 245,975 persons, or 3·23 per cent.

Ages.—There is a marked diminution, amounting to 12·2 per cent., in the number of children and young persons under 20 years of age in 1901 compared with 1891. There is also a decrease in the number of persons in the age periods from 40 to 55, and from 70 upwards, amounting to 8·6 and 11·7 per cent. respectively.

Conjugal Condition.—The number of married persons in 1901 was—males, 578,491 ; females, 590,907. In 1891 they were

respectively 613,649 and 626,031. Widowers and widows were 88,034 and 211,031, compared with 91,500 and 232,004 respectively in 1891. The unmarried were—males, 1,533,515; females, 1,456,797; the corresponding figures for 1891 being 1,613,804 and 1,527,762.

Birth-places.—In 1891 the number of Irish-born persons enumerated who did not reside in the county in which they were born amounted to 10·8 per cent. of the population. In 1901 they amounted to 11·1 per cent., or an increase of 0·3 per cent. In 1891 the number of persons born in England enumerated in Ireland amounted to 74,523; in 1901 the number was 76,977, being an increase of 2,454, or 3·3 per cent. The number of natives of Scotland in Ireland in 1891 was 27,323; in 1901, 30,101, or an increase of 10·2 per cent. The number of persons born outside the United Kingdom who were in Ireland on the Census night in 1891 was 21,521, and in 1901, 24,750, or an increase of 15·0 per cent.

Religious Professions.—"Roman Catholics" decreased from 3,547,307 in 1891 to 3,308,661 in 1901, or 6·7 per cent. "Protestant Episcopalians" ("practically 'The Church of Ireland,'" as the Registrar-General rather oddly phrases it) decreased from 600,103 in 1891 to 581,089 in 1901, or 3·2 per cent. "Presbyterians" decreased 0·4 per cent., their number being 443,276 in 1901, as against 444,974 in 1891. "Methodists" showed an increase from 55,500 in 1891 to 62,006 in 1901, or 11·7 per cent. All other persuasions increased from 56,866 in 1891 to 63,743 in 1901, being an increase of 12·1 per cent. There were 3,898 "Jews."

Education.—In 1901 the number of persons in Ireland five years old and upwards who were wholly illiterate was equal to 13·7 per cent. of the population; in 1891 the percentage was 18·4, showing a decrease in 1901 of 4·7 in the percentage. The number of persons aged five years and upwards in 1901 who could read only was 6·9 per cent. of the population; in 1891 the percentage was 11·0, showing a decrease in 1901 of 4·1 in the percentage. In 1891, 70·6 per cent. of the population aged five years and upwards were able to read and write; in 1901 the percentage was 79·4, showing an increase of 8·8 in the decade.

Schools and Scholars.—In 1901 there were returned 9,157 establishments for primary instruction, attended by 636,777 pupils. In 1891 the number of establishments was 9,177, and the number of pupils 685,074, showing a decrease of 48,297 pupils, or 7·0 per cent. In 1901 there were 510 establishments

(including Colleges) for superior instruction, with 38,565 students, and in 1891, 490, with 27,769 students, showing an increase of 10,796 students, or 38·9 per cent.

Occupations.—The Professional Class in 1891 numbered 214,243, or 4·55 per cent. of the population. In 1901 it numbered 131,035, or 2·94 per cent., a decrease of 1·61 in the percentage. This reduction is the result of the transfer, on the present occasion, to the "Indefinite and Non-productive Class," of large numbers of persons aged 15 years and upwards returned as "Scholar," &c., who in 1891 and previous Censuses were tabulated as "Students" and included in the Professional Class.

The Domestic Class in 1891 amounted to 255,144, or 5·42 per cent. In 1901 it was 219,418, or 4·92 per cent., a fall of 0·50 in the percentage.

The Commercial Class in 1891 was 83,173, or 1·77 per cent. In 1901 it had risen to 97,889, or 2·20 per cent.. an increase of 0·43 in the percentage.

The Agricultural Class in 1891 numbered 936,759, or 19·92 per cent. In 1901 it had fallen to 876,062, or 19·65 per cent., a decrease of 0·27 in the percentage.

The Industrial Class in 1891 was represented by 656,410 persons, or 13·95 per cent. In 1901 the number was 639,413, or 14·34 per cent., an increase of 0·39 in the percentage.

The Indefinite or Non-productive Class.—The number tabulated in this class for 1891 was 2,559,021, or 54·39 per cent. In 1901 it was 2,494,958, or 55·96 per cent., an increase of 1·57 per cent. This increase is accounted for by the transfer from the Professional Class (see above).

Families.—The number of families in 1901 was 910,256; in 1891 the number was 932,113, showing a decrease of 2·3 per cent. in 1901.

Houses.—The inhabited houses decreased from 870,578 in 1891 to 858,158 in 1901, or 1·4 per cent. Houses of the first class increased from 70,740 to 75,225, or 6·3 per cent. Second class houses increased from 466,632 to 521,454, or 11·7 per cent. The number of third class houses is 251,606, against 312,589 in 1891. This represents a decrease of 60,983, or 19·5 per cent.; and fourth class houses (mud cabins) decreased from 20,617 in 1891 to 9,873 in 1901, or 52·1 per cent.

The plan of Classification is the same as that adopted in former Censuses, and may be thus described:—

The value or condition of a house, as to its quality, may be

considered to depend mainly on :—1st, its extent, as shown by the number of rooms ; 2nd, its quality, as shown by the number of its windows ; and 3rd, its solidity or durability, as shown by the material of its walls and roof. If numbers be adopted to express the position of every house in a scale of each of these elements, and if the numbers thus obtained for every house be added together, a new series of numbers will be produced, giving the position of each house in a scale compounded of all the elements—*i.e.*, their actual state.

Four classes have been adopted, and the result is, that in the lowest of the four classes are comprised houses principally built of mud or other perishable material, having only one room and window ; in the third a better description of house, varying from one to four rooms and windows ; in the second, what might be considered a good farm-house, having from five to nine rooms and windows ; and in the first class, of all houses of a better description than the preceding.

The accommodation which the houses afford has also been arranged under four classes, viz. :—First class accommodation, consisting of first class houses occupied by one family. Second class accommodation, consisting of second class houses occupied by one family, or of first class houses occupied by two or three families. Third class accommodation, comprising third class houses with one family each, or second class houses with two or three families, or first class houses occupied by four or five families. Fourth class accommodation includes all fourth class houses, third class houses with more than one family, second class houses with four or more families, and first class houses inhabited by six or more families.

Rateable Valuation.—The rateable valuation of Ireland rose from £14,034,681 1s. 9d. in 1891 to £14,932,754 1s. in 1901, or 6·4 per cent.

Births.—From April 1st, 1891, to March 31st, 1901, 1,052,729 births were registered, against 1,147,321 during the preceding ten years.

Marriages.—The marriages registered amounted to 221,582, the number in the previous ten years being 212,256.

Deaths.—The deaths were 834,552, against 879,412 for the previous decade.

Emigration.—The number of emigrants from Ireland during the decade was 430,993 (200,125 males, and 230,868 females) ; in the previous decade the emigrants amounted to 768,105.

Sickness.—The sick and infirm of all kinds on Census night of 1901 numbered 68,862, or 1 in 65 of the whole population. Of these, 35,588 were temporarily diseased, and 33,274 permanently diseased. In 1891 the number of sick and infirm on Census night was 66,664, or 1 in 71 of the whole population. Of these, 35,722 were temporarily diseased, and 30,942 permanently diseased.

Blind.—The number of the totally blind in Ireland in 1901 was 4,253. In 1891 the number was 5,341.

Deaf and Dumb.—The deaf and dumb numbered in 1901 3,076; in 1891 their number was 3,365.

Dumb, not Deaf.—The number tabulated under this heading in 1891 was 1,099, and in 1901 it was 895.

Lunatics and Idiots.—The total number of lunatics and idiots returned in 1891 was 21,188, and in 1901 the number amounted to 25,050. The number of lunatics enumerated on Census night of 1901 was 19,834 (10,213 males, and 9,621 females), of whom 596 were at large, 16,587 were in asylums, and 2,651 in workhouses. In 1891 the number of lunatics was 14,945 (7,463 males, and 7,482 females), 893 being at large, 11,265 in asylums, and 2,787 in workhouses. There were, in 1901, 5,216 idiots (2,946 males, and 2,270 females), of whom 3,272 were at large, 763 in asylums, and 1,181 in workhouses. In 1891 there were 6,243 idiots (3,501 males, and 2,742 females). Of these, 4,077 were at large, 996 in asylums, and 1,170 in workhouses. A decrease in the number of persons returned as idiots, and an increase in the number of lunatics, also appeared in the Census of 1891, as compared with that of 1881.

Division of Land.—In 1901 the total extent under crops (including meadow and clover) was 4,631,051 acres, in 1891 it was 4,818,381 acres. The extent under grass in 1901 was 10,577,238 acres, against 10,298,654 acres in 1891. Woods and plantations in 1901 occupied 309,741 acres, as against 311,554 acres in 1891, and turf bog, marsh, barren mountain, roads, fences, &c., represented 4,710,162 acres in 1901 and 4,769,677 acres in 1891.

Land under Crops.—In 1901 the extent of land under cereal crops was 1,317,574 acres, under green crops 1,079,443 acres, under flax 55,442 acres, and under meadow and clover 2,178,592 acres. In 1891 the acreage under cereal crops was 1,492,763, under green crops 1,191,424, under flax 74,665, and under meadow and clover 2,059,529.

Live Stock.—The number of live stock in 1901 was as follows:—Horses and mules 593,798, asses 238,980, cattle 4,673,323, sheep

4,378,750, pigs 1,219,135, goats 312,409, and poultry 18,810,717. In 1891 the numbers were—horses and mules 621,479, asses 216,268, cattle 4,448,516, sheep 4,722,613, pigs 1,367,712, goats 336,337, and poultry 15,276,128.

Language.—The number of persons returned as speaking Irish only in 1901 was 20,953, or 0·47 per cent. In 1891 the number so returned was 38,192, or 0·81 per cent. The persons who could speak "English and Irish" in 1901 amounted to 620,189, or 13·9 per cent. In 1891 they were 642,053, or 13·6 per cent.

Navy and Military serving in Ireland.—The number of the Navy and Military serving in Ireland in 1891 was 25,725, and in 1901 it was 21,235.

Foreigners.—The number of foreigners in Ireland in 1901 was 16,541; in 1891, 12,900, showing an increase of 3,641.

Pauperism.—The number of paupers in the workhouses of Ireland on Census night in 1901 was 43,043, being 695, or 1·6 per cent. over the number in 1891. The number of persons in receipt of outdoor relief in Ireland at the date of the Census of 1901 was 58,365. The corresponding number in 1891 was 62,988.

CODEIN AND GLYCOSURIA.

C. A. Herter, M.D. (*Medical News*, New York, October 25), in the course of an article on "the newly recognised sugar-controlling function of the suprarenal glands," asks—Does codein repress human glycosuria by acting upon the suprarenal gland or its internal secretion? Answering his own question as follows:—"The well-known fact that codeine diminishes the excretion of some diabetic patients, at least temporarily, suggested an inquiry as to its method of action and led to some observations of considerable interest. It was found that when an aqueous solution of codeine is mixed with a solution of adrenalin in suitable proportions the addition of a drop of a ferric chloride solution does not cause the appearance of the transitory emerald-green reaction (Vulpian's reaction), but gives a characteristic maroon coloration which is very striking. I take this to indicate that codeine enters into chemical union with adrenalin which alters the chemical properties and probably the physiological action of the latter. It is a noteworthy thing that pyrocatechin, a trihydoxyphenol which has been regarded by some investigators as the active principle of the blood-pressure-raising constituent of the suprarenal gland, yields a similar reaction when treated with codeine."

ROYAL ACADEMY OF MEDICINE IN IRELAND.

President—Lombe Atthill, M.D., F.R.C.P.I.
General Secretary—John B. Story, M.B., F.R.C.S.I.

SECTION OF SURGERY.

President—L. H. Ormsby, P.R.C.S.I.
Sectional Secretary—John Lentaigne, F.R.C.S.I.

Friday, November 14, 1902.

Laminectomy for Paraplegia due to Spinal Caries.

Sir Thomas Myles gave details of two cases, of which one case was successful, and the other experienced no benefit. He discussed the opinions of Sir Victor Horsley and other surgeons, and expressed the opinion that early operation was to be recommended.

Mr. Doyle said that he performed laminectomy on a case in 1892. He found pachymeningitis and an abscess in front of the cord. Cystitis was also present. The patient had had paraplegia, there was improvement for two or three days after the operation, but subsequently the case did not do well. Most cases would get well if treated by rest and extension.

Mr. Swan said one danger from the operation might be a rapid dissemination of the tuberculosis. Cystitis was one of the indications for laminectomy. Some years ago he operated on a case of spinal caries in a boy, in which there was paraplegia and great cystitis; the patient got relief from the bladder symptoms, but none from the paraplegia. The lumbar region was a bad place for the operation. In most cases paraplegia was caused by disease above the sixth dorsal vertebra. Laminectomy should not be done as a matter of routine—he dissented quite from the opinion that it should. Recovery would come with rest and time extending over, say, a period of two years. With regard to the operation, he thought the best plan was when the muscles were scraped away first to trephine the bases of the lower spinous processes, and thus get access to the interior of the canal. An objection he had to laminectomy was that the patient was so helpless, could not sit up, or use his limbs, and the extensive removal of muscles, &c., was a disability not recovered from.

Sir Thomas Myles, in reply, said he had operated on only two cases, and they were practically experimental. There was a great

deal to be said for and against the operation. It was a very serious operation, and a case showing signs of active caries, &c., would not be suitable for operation, but a case with only the paralysis should have the benefit of it. The treatment would be long and too expensive for hospital. The choice of instruments lay between the chisel and mallet, the trephine, or a Giglio saw. The chisel and mallet should be avoided on account of the concussion, &c., and he thought that a Giglio saw could be easily passed with a bent probe, and it might not be necessary to detach the muscles, but merely to turn them back as a kind of flap.

Radical Cure of Hernia in Young Children.

Mr. Denis Kennedy, Surgeon to the Children's Hospital, Temple-street, Dublin, condemned the use of trusses, because they were frequently ineffectual in keeping up a hernia, and because the wearing of them was always associated with a great deal of trouble to the child. He demonstrated the safety with which the operation for radical cure can be carried out, by quoting sixty cases which he had done himself in children under five years old, many of them being under twelve months. In his operations he had three cases of strangulated hernia, all of which recovered. In two cases he met the vermiform appendix in the inguinal canal; in both he resected the appendix, as, on account of their size, he considered they could not with safety be returned to the abdominal cavity. He never had a death resulting from his operation.

Sir Thomas Myles thought the operation was a comparatively simple one. The points to be borne in mind were—the necessity for rapidity, arrest of all hæmorrhage, and great care in the administration of the anæsthetic. It was not necessary to carry out any elaborate treatment. Treatment by truss might be successful, but it was merely mechanical, and took years to effect what the operator did in so many days. He did not think that congenital hernia was a common disease.

Mr. McArdle said he had operated at all ages from three months to eighty-four years, and he did not see why, in the absence of constitutional disease, the cases should not have the benefit of the radical cure. One complication of the operation he had met with was interference with micturition, and in these cases torsion of the sac had been carried out. In congenital hernias he found no difficulty in separating the cord from the sac if he passed his finger as far as the internal abdominal ring, where the elements of the cord can be felt. Another point was, in the case of a hernia with

no posterior sac, such as the cæcum, where you have to push back the cæcum and ligature the portion of the peritoneum which is left behind. With regard to operations on children it was even more essential to split up the anterior wall of the inguinal canal than in the case of adults. All talk about dealing with the sac had no bearing on hernia. In repairing the stratum of the abdominal wall the external oblique had to be brought down to Poupart's ligament, but care must be taken not to displace the cord. In all radical operations we try to imitate Nature, which intended that the cord should lie over the pubis and not pass through a muscular opening. We expose the elements of the cord to intermittent pressure, which should not occur.

Mr. E. H. Taylor said that first, as to the question of the bladder, he would like to know if it had come into view in exposing the neck of the sac. He had frequently, in drawing the peritoneum upwards, seen the bladder appearing at the internal abdominal ring. He said he was with those who spoke against twisting the sac, and was of opinion that this procedure should never be employed. He had never had the least difficulty in the treatment of the sac of congenital hernia. He opened up the sac and then the testicle is seen, and he caught each end of it with a pair of clip forceps and put on another pair between, and this enabled him to cut with the scissors along a straight line. There were two different conditions in which the cord was found—one in which the cord lies behind the serous membrane, and one in which the cord is suspended by a fold of serous membrane in which it is floating. If you catch the sac in the middle you can form a serous ridge, and can peel the cord up to the internal abdominal ring. He said it was quite unnecessary to divide the aponeurosis of the external oblique. If you operate early enough you get the inguinal canal in a growing condition, and it accommodates itself to its new position.

Mr. Tobin said he differed with Mr. Kennedy on one point, and that was that treatment by truss was, as a rule, unsuccessful. If trusses are continuously applied and worn for one or two years, a radical cure is the rule. It was certainly a very tedious process and hard to carry out ; but the fact that radical cure is effected by obliterating the sac showed that simple pressure was sufficient. Such treatment is out of reach of poor people, but those who are well-to-do like it, and it avoids the operation. As to the proper treatment for ordinary hernia, he thought that cure by operation was the proper method.

Mr. Doyle said he believed that only exceptional cases in children should be operated on. He thought a truss should always be worn for some time after the operation.

Dr. More O'Farrell said in one case of a child of five months radical cure was performed on one side, and two days afterwards on the other side, circumcision being performed in the meantime, and the child recovered.

Dr. Haughton said that radical cure was the right cure, and it was very little more dangerous than wearing a truss. The youngest case he had operated on was a child of three weeks. It was a seven months' child, greatly emaciated and very feeble.

Mr. Lentaigne said he agreed with Mr. Kennedy that for most hospital patients operation was the best treatment. It was impossible for the mothers in these cases to give the care and attention that the treatment by truss required. Even in the case of wealthy people operations should be allowed much more often than was the case. No complicated operation was necessary. A very simple procedure was sufficient. So long ago as 1884 he operated on an infant, aged eleven months, for strangulated hernia. In that case the collapsed state of the patient was such that he had barely time to put in one or two sutures, yet he had recently seen that patient perfectly cured of the hernia by that apparently insufficient operation. He had found considerable difficulty in separating the cord from the sac in congenital cases, and he would be glad to try Mr. Taylor's plan next time he met with this difficulty. He had operated on many young children since 1884, and had never had a death, although the first case, already mentioned, had been extremely near to death.

Mr. Kennedy, in reply, said that in congenital hernia he had found it impossible to separate the cord from the sac. The elements of the cord formed part and parcel of the sac.

SECTION OF MEDICINE.

President—A. V. Macan, M.B.; President, Royal College of Physicians of Ireland.

Sectional Secretary—R. Travers Smith, M.D.

Friday, November 21, 1902.

Erythema Marginatum Perstans.

Dr. Finny read the notes of a remarkable case of this rare affection in a lad, aged twenty-one, who had been under his care

in Sir Patrick Dun's Hospital for the last five weeks. The case presented two prominent features—(1) of having lasted off and on for over three years, and (2) of the curious marginate lines the disease assumed. Hence he described it as Erythema Marginatum Perstans. The eruption, for which no cause could be assigned, occurred suddenly, with a sensation of malaise, and came out first on the thighs, knees, and trunk. It has of late spread more on the arms to the wrists, and on the legs to the dorsum of the feet. It has spared the face, scalp, and upper part of the neck. When appearing it is itching and tingling somewhat like a hive, but the itching is slight as a rule. The eruption presents the polymorphism found in erythema multiforme—papules, circles, segments, gyrated patches, and long lines, erythema marginatum. The lines are chiefly found on the thighs and near the axilla, on the thorax and upper arm, and present curious devices. The eruption is pinkish-red, red, or reddish-brown. Its mode of growth can be readily studied. Commencing as a papule the size of a small pea, smooth, non-vesicular, it rapidly spreads peripherally, and in three to four days forms a circle, the centre being of the normal skin hue, while the encircling raised margin widens out. Should it meet another similar circle, the meeting arcs break down and a gyrate irregular body is the result. Again, one side of the circle may disappear, and the remaining coloured rim may end in long, wavy, or hooked lines, the terminals being as sharply raised above the skin as the rest of the line. In a very few instances a little vesiculation was detected, due to rubbing or scratching. There were no examples found of "erythema iris" or "erythema nodosum." The diagnosis lay between erythema multiforme and eczema, dermatitis herpetiformis, urticaria, and the gyrate forms of psoriasis. The distinguishing features were discussed, and reference was then made to the rarity of the disease, as judged by the reticence of, or slight passing mention made in, the standard works on diseases of the skin (including Stelwagon's volume, 1902) on this particular variety. With the exception of three instances, which showed a very limited distribution of erythema gyratum of a lasting duration, there were no references to or exhibits of it in the volumes of *American Journal of Skin Diseases*, or in the records of the Dermatological Society of Great Britain and Ireland. There was one unusual symptom present—namely, enlargement of the glands in the groin and axilla. No special treatment seemed to do good, though the great improvement which has followed a course of thyroid extract may justify its use as a therapeutic agent of some value.

Dr. Walter Smith said he had never seen a parallel case, but showed an illustration, published by Dr. Fox in the International Library of Rare Skin Diseases, which was almost a reproduction of Dr. Finny's illustration. His own inclination was to refer the case to erythema multiforme, but the boundaries of the erythema group were very badly defined. Accounts published by experts of diseases classed under erythema multiforme led to great confusion. There were two features to be noted in the case—(1) the serpentine, gyrate outline; and (2) its persistency and rebelliousness to treatment. He referred to a case which he had had in the Adelaide Hospital, in which the gyrate outline was very well shown; several of the rings of erythema were tipped with vesicles and conjoined with vesication. No one hesitated to class it as erythema multiforme. Referring to its persistency, Dr. Smith quoted a pair of cases of the affection which had occurred in a brother and sister, in which the eruption persisted for a considerable time; the cases were evidently similar, the eruption beginning with papules, then going on to patches, circular, annular, and gyrate.

Dr. Wallace Beatty said he had never met a case like Dr. Finny's, and referred to the figured eruption which is seen in cases of psoriasis, a figuration which resembled that seen in the case they were discussing.

Dr. Doyle described a somewhat similar case.

Dr. Finny, in the course of his reply, said he was inclined to try large doses of quinine.

Paroxysmal Tachycardia associated with Epilepsy.

Dr. R. Travers Smith reported the following case:—A girl, aged fourteen, suffered for a year past from "attacks of beating of the heart." They occurred every second or third day. They came on without cause or warning, lasted any time, from five minutes to four hours, then suddenly disappeared. During these her memory became defective, and occasionally unconsciousness resulted. Uncountably rapid pulse was noted by her step-mother, a trained hospital nurse, during these "heart attacks." In addition the patient suffered from minor epilepsy without heart hurry. During her stay in the Whitworth Hospital she had two major epileptic fits, and several paroxysms of tachycardia with heart-beat at the rate of 260 per minute. Bromide of potassium was given in increasing doses with great benefit, the epilepsy not having shown itself in the seven weeks the patient was under observation subsequently. The paroxysms of tachycardia became

less frequent and less severe, lasting only five minutes. The patient had a hereditary predisposition to epilepsy; three of her mother's first cousins, each of separate parentage, suffered from epilepsy. Dr. Travers Smith suggested that some cases of paroxysmal tachycardia might be fundamentally similar in their pathology to epilepsy, and analysed the close association between the two conditions in his patient.

Dr. Finny thought with Dr. Smith that the tachycardia and the epilepsy were allied in this case.

A Case of Lymphadenoma with Recurrent Pyrexia.

Drs. Bewley and J. A. Scott described a case of this disease. [The paper will be found at page 1.]

SECTION OF OBSTETRICS.

President—W. J. Smyly, M.D.

Sectional Secretary—John H. Glenn, M.D.

Friday, November 28, 1902.

Exhibition of Specimens.

Dr. Hastings Tweedy showed the following specimens:—(*a*) Tubal Pregnancy; (*b*) Ovarian Cyst and Pyosalpinx; (*c*) Salpingitis (two cases).

Notes on a Case of Amenorrhœa.

Dr. John Knott read a paper so entitled. [It will appear in the number of this Journal for February.]

Dr. Elizabeth Beatty described two cases of amenorrhœa which she had attended. One case was a very obstinate one, and had persisted for five years. Various remedies were tried, and finally treatment by electricity proved successful.

Puerperal Eclampsia.

Drs. Neill and McWeeney reported the following case:—Catherine R., aged twenty-eight, admitted on April 29th, 1902. Second pregnancy—first was natural, fifteen months ago. Patient was attended in the external department of the Coombe Hospital on April 20th by the Clinical Clerk about 10 p.m., who found her in a comatose condition, having had a severe fit. He administered $\frac{1}{2}$ gr. morphin hypodermically, and had her removed to hospital without delay. On admission she was in a condition of deep coma, the contraction of the pupils, however, not being very

pronounced; the skin was dry, and the temperature subnormal—in the axilla—the pulse being 63; she was not in labour. She was at once put into a wet pack and given croton oil ♏ j. The catheter was passed, and about 7 ozs. of bloody urine were drawn off. An enema of soap and water was given, which was retained. She was kept constantly on her side, and after two hours was taken out of the pack. She remained quiet until 3 a.m. of the following morning, when she had a severe fit, which lasted about 15 minutes. She was again put into the pack, and given ½ gr. of morphin hypodermically. At 3 50 a.m. she had another fit, which did not last so long. She was then taken out of the pack, and at 4 15 had another fit; at 5 45 she was given a glycerine enema, which was also retained. At 6 30 she was again put into the pack and given ♏ j. of croton oil. She remained perfectly quiet until 8 30, when the respirations were observed to be rather slow, the pupils also being dilated, the pulse remaining fairly good. She died rather suddenly and undelivered about 8 40 a.m., having remained unconscious from the time of her admission. The fœtal heart could not be heard. Percentage of urea in the urine was 0·8.

Dr. Alfred Smith said, in regard to the ætiology of this disease, that the kidney was most frequently blamed for it, but he was very doubtful if this was always correct. The kidney in Dr. Neill's case was apparently normal, except for the congestion, which is frequent in cases of toxæmia. He thought that incompetence of the liver was probably to blame.

Dr. Kidd thought that a good deal might be said as to the liver being the cause, but we should wait a long time if we referred all cases of eclampsia to any one organ. He said that there must have been tremendous pressure on the ureters, but he did not know if that had any bearing on the attack.

Dr. Neville said that the treatment seemed to him to be the point of interest. The strain on the right side of the heart must have been very great, and having seen a case of status epilepticus treated by bleeding from the forearm, which immediately gave very remarkable relief, he thought if it had been adopted in this case the patient might have survived the attack.

Dr. Hastings Tweedy, speaking of the toxæmic theory, said that Bouchard was the originator of it, and had entirely proved his case from his own point of view, but Bouchard's theory had been refuted, and now we were much less certain of the toxæmic theory. The great mistake Bouchard made was that he drew off the urine without any aseptic precautions; it is now found

that every urine is toxæmic if left for any length of time exposed to the air. When drawn off with proper aseptic precautions eclamptic urine shows no toxin, and has no worse effect on rabbits, &c., than urine in normal health. The body naturally secreted poisons which had to be eliminated through the kidneys, but sometimes these organs appeared to be sluggish, and did not secrete as much as they should, and the result was seen in headaches, dyspepsia, &c., which were especially common in women. These symptoms were cured by drinking warm water, and he thought that women should drink more fluid; the want of it was shown by headaches, then twitching, and finally eclampsia. In pregnancy a woman had to eliminate not only her own poisons, but also those of the fœtus, and this double dose, combined with the fact that her nervous system was then more excitable, made her a good subject for eclampsia. He referred to the difficulty which Dr. Neill had in getting the bowels of his patient to move with croton oil, and said that one drop was nothing; up to six or seven could be given. He thought that in some cases the poison was not in the blood, but deposited in the solid tissues, and therefore bleeding was of use, because it drew it into the blood stream. He doubted if pressure on the ureters could be the cause of eclampsia.

Dr. Neill, in replying, said that in these cases the kidneys were not always diseased, but that often they were. He then referred to a patient who was admitted to hospital suffering from albuminuric retinitis. She got well. She was 7 months pregnant and developed eclampsia. Though she recovered from this, she became totally blind. She had five bad fits, then they ceased, and three weeks afterwards a macerated fœtus was expelled. There was a large quantity of albumin in the urine. In that case undoubtedly the kidneys were diseased. Other cases, he said, had shown large quantities of albumin, but it quickly disappeared. He never performed venesection; the patients were simply kept as quiet as possible. In nearly all the cases of eclampsia he had seen there had been very little post-partum hæmorrhage. He had seen a peculiar case in which death resulted apparently from eclampsia—the convulsions came on after the child was born. In this case there was very advanced tuberculous disease of the lungs. He said that 2 minims of croton oil were given, and at the *post-mortem* nothing was found in the bowels. The stomach was greatly distended with gas; the small intestine was empty. There was nothing abnormal in the abdominal cavity except the ureter, which was quite unrecognisable from its enormous distension.

SANITARY AND METEOROLOGICAL NOTES.

Compiled by Sir John Moore, B.A., M.D. Univ. Dubl.; F.R.C.P.I.; F.R. Met. Soc.; Diplomate in State Medicine and Ex.Sch. Trin. Coll. Dubl.

Vital Statistics.

For four weeks ending Saturday, November 29, 1902.

IRELAND.

Twenty-two Town Districts.

The average annual death-rate represented by the deaths—exclusive of deaths of persons admitted into public institutions from without the respective districts—registered in the week ending November 29, 1902, in the Dublin Registration Area and the twenty-one principal provincial urban districts of Ireland was 24·2 per 1,000 of their aggregate population, which, for the purposes of these returns, is estimated at 1,092,401. The deaths registered in each of the four weeks ended Saturday, November 29, and during the whole of that period, in the several districts, alphabetically arranged, corresponded to the following annual rates per 1,000 :—

Towns, &c.	Week ending				Average Rate for 4 weeks	Towns, &c.	Week ending				Average Rate for 4 weeks
	Nov. 8	Nov. 15	Nov. 22	Nov. 29			Nov. 8	Nov. 15	Nov. 22	Nov. 29	
22 Town Districts	23·8	22·8	22·8	24·2	23·4	Lisburn -	13·6	13·6	4·5	13·6	11·3
Armagh -	27·5	27·5	41·2	27·5	30·9	Londonderry	17·9	17·9	23·0	15·4	18·6
Ballymena	4·8	4·8	4·8	14·4	7·2	Lurgan -	31·0	22·1	13·3	31·0	24·3
Belfast -	19·8	23·0	20·8	21·1	21·2	Newry -	16·8	12·6	16·8	12·6	14·7
Clonmel -	25·6	35·9	25·6	15·4	25·6	Newtownards	57·2	11·4	17·2	51·5	34·3
Cork -	21·2	17·1	15·1	15·1	17·1	Portadown	15·5	0·0	10·3	15·5	10·3
Drogheda -	8·2	20·4	28·6	36·8	23·5	Queenstown	26·4	6·6	13·2	13·2	14·9
Dublin - (Reg. Area)	30·3	26·7	31·1	30·6	29·7	Sligo -	43·2	14·4	0·0	9·6	16·8
Dundalk -	31·9	23·9	16·0	23·9	23·9	Tralee -	21·1	21·1	26·4	21·1	22·4
Galway -	23·3	3·9	11·7	15·5	13·6	Waterford	17·5	27·3	3·9	37·0	21·4
Kilkenny -	19·7	29·5	9·8	0·0	14·8	Wexford -	23·3	32·7	23·3	32·7	28·0
Limerick -	13·7	20·5	19·1	26·0	19·8						

The deaths (excluding those of persons admitted into public institutions from without the respective districts) from certain epidemic diseases, registered in the 22 districts during the week ended Saturday, November 29, were equal to an annual rate of 3·8 per 1,000, the rates varying from 0·0 in fifteen of the districts to 20·6 in Armagh—the 4 deaths from all causes registered in that district including 2 from measles and one from diarrhœa. Among the 145 deaths from all causes in Belfast are 14 from measles, 4 from whooping-cough, one from diphtheria, 6 from enteric fever, and 5 from diarrhœa. The 19 deaths in Limerick include 9 from measles.

DUBLIN REGISTRATION AREA.

The Dublin Registration Area now consists of the City of Dublin as extended by the Dublin Corporation Act, 1900, together with the Urban Districts of Rathmines, Pembroke, Blackrock, and Kingstown. The population of this Area is 378,761 : that of the City being 293,394, Rathmines 33,208, Pembroke 26,025, Blackrock 8,759, and Kingstown 17,380.

In the Dublin Registration Area the births registered during the week ended Saturday, November 29, amounted to 158—86 boys and 72 girls ; and the deaths to 230—119 males and 111 females.

Deaths.

The registered deaths represent an annual rate of mortality of 31·7 in every 1,000 of the population. Omitting the deaths (numbering 8) of persons admitted into public institutions from localities outside the Area, the rate was 30·6 per 1,000. During the forty-eight weeks ending with Saturday, November 29, the death-rate averaged 24·8, and was 1·5 below the mean rate for the corresponding portions of the ten years 1892–1901.

There were 14 deaths from measles—in the preceding 4 weeks the deaths registered were respectively 16, 16, 10, and 19. Deaths from scarlet fever rose from 5 in the preceding week to 8 in the week under review. Influenza caused 3 deaths, diphtheria 4 deaths, and enteric fever 4 deaths. There were 2 deaths from epidemic diarrhœa and 5 deaths from *diarrhœa*.

Of 34 deaths from tuberculous diseases, tuberculous phthisis and *phthisis* caused 22 deaths, tuberculous meningitis 3 deaths, tuberculous peritonitis one death, and 8 deaths were due to other forms of the disease.

Three deaths were registered from carcinoma, and 6 deaths as due to *malignant disease* ("*cancer*").

There were 17 deaths from diseases of the nervous system, including 10 deaths of children under 5 years of age from *convulsions.*

Diseases of the heart and blood-vessels caused 22 deaths.

Diseases of the respiratory organs caused 53 deaths—a number which is equal to an annual rate of 7·3 per 1,000 of the population of the Dublin Registration Area. The annual rate for the corresponding period of the past 10 years was 6·2 per 1,000. In the above total, 36 deaths from bronchitis, 9 deaths from bronchopneumonia, and 5 deaths from *pneumonia*, are included.

There was one death from accidental drowning and one death by suicide.

In 13 instances the cause of death was "uncertified," there having been no medical attendant during the last illness. These cases comprise the deaths of 9 children under 5 years of age (including 6 infants under one year old) and the death of one female aged 78 years.

Ninety-five of the persons whose deaths were registered were under 5 years of age (49 being infants under one year, of whom 12 were under one month old), and 46 were aged 60 years and upwards, including 20 persons aged 70 and upwards, of whom 5 were octogenarians.

The Registrar-General points out that the names of causes of death printed above in italics should be avoided whenever possible in Medical Certificates of the Cause of Death.

STATE OF INFECTIOUS DISEASE IN DUBLIN.

(1.) Cases of Infectious Diseases Notified to the Public Health Committee of the Corporation.

Sir Charles A. Cameron, C.B., Medical Superintendent Officer of Health for the City of Dublin, has furnished information regarding the number of cases of infectious diseases in the City of Dublin notified under "The Infectious Diseases (Notification) Act, 1899," as follows :—

Week ending November	8, 1902,	.. ..	267 cases.
,, ,,	15, ,,	.. ..	247 cases.
,, ,,	22, ,,	.. ..	170 cases.
,, ,,	29, ,,	.. ..	236 cases.

Of the 236 cases notified in the week ended November 29, 22 were erysipelas, 26 enteric fever, 31 scarlatina, 14 diphtheria, 135

measles, 3 "continued fever," one puerperal fever, 3 rubella, and one varicella.

(2.) Cases of Infectious Diseases in Rathmines Urban District.

Mr. Fawcett, Executive Sanitary Officer for Rathmines Urban Council, has furnished information regarding the number of cases of infectious diseases in the Urban District of Rathmines notified under "The Infectious Diseases (Notification) Act, 1889," as follows :—

Week ending November	8,	1902,	..	..	8	cases.
,, ,,	15,	,,	..	..	13	cases.
,, ,,	22,	,,	..	..	4	cases.
,, ,,	29,	,,	..	..	4	cases.

Of the 4 cases notified in the last week, 3 were measles, and one was scarlet fever.

(3.) Cases of Infectious Diseases in Pembroke Urban District.

Mr. Manly, Executive Sanitary Officer for Pembroke Urban Council has furnished information regarding the number of cases of infectious diseases in the Urban District of Pembroke notified under "The Infectious Diseases (Notification) Act, 1889," as follows :—

Week ending November	8,	1902,	..	..	10	cases.
,, ,,	15,	,,	..	..	16	cases.
,, ,,	22,	,,	..	..	9	cases.
,, ,,	29,	,,	..	..	5	cases.

Of the 5 cases notified in the last week, one was erysipelas, 2 were measles, and 2 were whooping-cough.

(4.) Cases of Infectious Diseases under Treatment in Dublin Hospitals.

During the week ending Saturday, November 29, forty-seven cases of measles were admitted to hospital, being 23 above the admissions in the preceding week : 32 patients were discharged, there were 6 deaths, and 99 cases remained under treatment at the close of the week.

Fourteen cases of enteric fever were admitted to hospital, 19 cases were discharged, there were 3 deaths, and 84 cases remained under treatment at the close of the week.

Thirty-two cases of scarlatina were admitted to hospital, 22 cases were discharged, there were 7 deaths, and 177 cases remained under treatment at the close of the week. This number is exclusive

of 24 convalescents from scarlatina who remained under treatment at Beneavin, Glasnevin, the Convalescent Home of Cork-street Fever Hospital.

One case of typhus was admitted to hospital, 3 cases were discharged, and 2 remained under treatment at the close of the week.

Eighteen case of diphtheria were admitted to hospital, 12 were discharged, there were 3 deaths, and 54 cases remained under treatment at the close of the week.

In addition to the above named diseases, 3 cases of pneumonia were admitted to hospital, 2 patients were discharged, and 5 cases remained under treatment at the end of the week.

STATE OF INFECTIOUS DISEASE IN THE CITY OF BELFAST.

Dr. Whitaker, Medical Superintendent Officer of Health, has furnished information regarding the number of cases of infectious diseases in the City of Belfast notified under "The Infectious Diseases (Notification) Act, 1889," as follows :—

Week ending November	8,	1902,	..	..	80	cases.
,, ,,	15,	,,	..	..	63	cases.
,, ,,	22,	,,	..	..	69	cases.
,, ,,	29,	,,	..	..	59	cases.

Of the 59 cases notified in the week ended November 29, 20 were enteric fever, 13 erysipelas, 7 diphtheria, 10 "continued fever," 7 scarlet fever, and 2 were puerperal fever.

ENGLAND AND SCOTLAND.

The mortality for the week ended Saturday, November 29, in 76 large English towns, including London (in which the rate was 19·4), was equal to an average annual death-rate of 19·1 per 1,000 persons living. The average rate for eight principal towns of Scotland was 20·0 per 1,000, the rate for Glasgow being 19·6 and for Edinburgh 21·9.

Meteorology.

Abstract of Observations made in the City of Dublin, Lat. 53° 20′ N., Long. 6° 15′ W., for the Month of November, 1902.

Mean Height of Barometer,	29·746 inches.
Maximal Height of Barometer (2nd, at 9 a.m.),	30·287 ,,
Minimal Height of Barometer (8th, at 3 p.m.),	29·060 ,,
Mean Dry-bulb Temperature,	46·8°.
Mean Wet-bulb Temperature,	44·8°.
Mean Dew-point Temperature,	42·5°.
Mean Elastic Force (Tension of Aqueous Vapour),	·276 inch.
Mean Humidity,	85·9 per cent.
Highest Temperature in Shade (on 1st),	58·9°.
Lowest Temperature in Shade (on 27th),	35·2°.
Lowest Temperature on Grass (Radiation) (20th),	30·0°.
Mean Amount of Cloud,	63·3 per cent.
Rainfall (on 18 days),	3·331 inches.
Greatest Daily Rainfall (on 6th),	·880 inch.
General Directions of Wind,	S.E., W.

Remarks.

November proved a fitting sequel to the dreary wet months of 1902 which preceded it. There was, indeed, a remarkable anticyclonic period—rainless, cold, and squally—from the 14th to the 21st inclusive ; but, for the rest, rain fell almost daily and often heavily. The anticyclone alluded to was of great intensity and staying power. It was central over the southern half of Scandinavia, in which region the barometer rose to nearly 31 inches on the night of the 17th (Stockholm reported 30·96 inches ; Wisby, 30·97 inches). Connected with this high pressure system a bitter easterly wind swept across Central Europe, accompanied by severe frost and snowstorms. In the British Isles the wind drew into S.E., and on the West Coast of Norway into S.W. On the morning of the 19th, the distribution of temperature was very curious. Berlin reported 14° F., while Bodö, on the Norwegian Coast, latitude 67° (that is, within the Arctic Circle), reported 44°, or 30° higher. In Dublin no frost occurred in the screen, but Birr had a temperature of 26° on the morning of the 20th, and even at Valentia the thermometer fell to 30° on the morning of the 30th. The duration of bright sunshine was estimated at 67·25 hours, or a daily average of 2·24 hours.

In Dublin the arithmetical mean temperature (47·5°) was

considerably above the average (45·4°); the mean dry-bulb readings at 9 a.m. and 9 p.m. were 46·8°. In the thirty-seven years ending with 1901, November was coldest in 1878 (M. T. = 38·2°), and in 1870 (M. T. = 42·2°); warmest in 1899 (M. T. = 50·7°), and in 1881 (M. T. = 50·3°).

The mean height of the barometer was 29·746 inches, or 0·114 inch below the corrected average value for November—namely, 29·860 inches. The mercury rose to 30·287 inches at 9 a.m. of the 2nd, and fell to 29·060 inches about 3 p.m. of the 8th. The observed range of atmospheric pressure was, therefore, 1·227 inches.

The mean temperature deduced from daily readings of the dry-bulb thermometer at 9 a.m. and 9 p.m. was 46·8°, or 3·8° below the value for October, 1902. The arithmetical mean of the maximal and minimal readings was 47·5°, compared with a thirty years' (1871–1900) average of 45·4°. On the 1st the thermometer in the screen rose to 58·9°—wind, W.N.W.; on the 27th the temperature fell to 35·2°—wind, S.E. The minimum on the grass was 30·0° on the 20th.

The rainfall was 3·331 inches, on 18 days—the rainfall was considerably, while the rainy days were slightly, above the average. The average rainfall for November in the thirty-five years, 1866–1900, inclusive, was 2·560 inches, and the average number of rainy days was 17·0. In 1888, 6·459 inches fell on 26 days. On the other hand, the rainfall in 1896 was only ·664 inch on 9 days. In 1899, 1·964 inches fell on 13 days, and in 1900, 4·873 inches on 19 days. In 1901 the rainfall was 3·620 inches on 11 days.

High winds were noted on 20 days, and attained the force of a gale on three days—the 8th, 11th, and 21st. The atmosphere was more or less foggy in Dublin on the 2nd, 3rd, 14th, 25th, 27th and 29th. A lunar halo was seen on the 9th. Lightning was seen on the 9th. Sleet and hail fell on the 20th—hail only on the 29th.

The rainfall in Dublin during the eleven months ending November 30th amounted to 27·812 inches on 190 days, compared with 15·378 inches on 141 days during the same period in 1887, 24·450 inches on 162 days in 1899, 32·736 inches on 196 days in 1900, 24·086 inches on 156 days in 1901, and a thirty-five years' average of 25·380 inches on 180 days.

At Cloneevin, Killiney, Co. Dublin, 4·03 inches of rain fell on 19 days, compared with a seventeen years' (1885–1901) average of 3·086 inches on 16·2 days. The maximal fall in 24 hours was

·66 inch on the 11th. Since January 1, 1902, 30·18 inches of rain have fallen at this station on 178 days. The corresponding figures for 1897 were 28·64 inches on 184 days; for 1898, 26·77 inches on 173 days; for 1899, 27·98 inches on 162 days; for 1900, 33·47 inches on 188 days; and for 1901, 26·10 inches on 161 days.

At Knockdolian, Greystones, Co. Wicklow, the rainfall was 5·290 inches on 17 days. Of the total quantity ·810 inch fell on the 11th, and ·700 inch on the 7th. From January 1st, 1902, up to November 30th, rain fell at Greystones on 157 days to the amount of 37·101 inches. The corresponding figures for 1897 were 38·185 inches on 188 days; for 1898, 28·786 inches on 156 days; for 1899, 32·870 inches on 162 days; for 1900, 30·926 inches on 173 days; and for 1901, 31·425 inches on 147 days.

Dr. B. H. Steede reports that at the National Hospital for Consumption, Newcastle, Co. Wicklow, the rainfall was 5·551 inches on 18 days, compared with 3·189 inches on 12 days in 1899, 5·724 inches on 18 days in 1900, and 3·196 inches on 13 days in 1901. The maximal falls in 24 hours were ·750 inch on the 11th, and ·642 inch on the 7th. Since January 1, 1902, the rainfall at Newcastle amounted to 35·293 inches on 172 days. The corresponding figures for 1898 were 31·197 inches on 157 days; for 1899, 30·832 inches on 152 days; for 1900, 34·323 inches on 168 days; and for 1901, 28·149 inches on 155 days. On the 1st the screened thermometers at the National Hospital rose to 58·0°, on the 20th they fell to 30·8°.

Dr. Arthur S. Goff reports that at Lynton, Dundrum, Co. Dublin, rain fell on 17 days to the amount of 4·61 inches, the greatest measurement in 24 hours being ·97 inch on the 6th. In November, 1901, the rainfall was 3·53 inches on 8 days. The mean temperature in the shade was 46·6°, the range being from 57° on the 1st to 35° on the 20th, 27th, and 29th.

In the City of Cork, rain fell on 21 days to the very large amount of 8·52 inches, or 4·57 inches above the average rainfall for November. There were three days in the month on which the measurement exceeded one inch—namely, the 6th, with 1·10 inches; the 10th, with 1·06 inches; and the 23rd, with 1·02 inches. The rainfall exceeded that of any November during the previous 37 years, and was more than double the average. The nearest approach to such a measurement was 7·87 inches in November, 1892.

At the Ordnance Survey Office, Phœnix Park, Dublin, the

rainfall was 2·553 inches on 17 days, compared with 4·075 inches on 13 days in November, 1901. The heaviest rainfall in 24 hours was ·915 inch on the 6th.

Dr. J. Byrne Power, F.R. Met. Soc., Medical Superintendent Officer of Health, Kingstown, Co. Dublin, reports that the mean temperature of November at that health resort was 47·7°, being 0·1° below the average for November during the previous 4 years. The extremes were—highest, 61° on the 2nd; lowest, 34·5° on the 29th. At Bournemouth the mean was 46·8°, being 0·1° above the average for November during the previous 4 years; the extremes were—highest, 58° on the 2nd and 7th; lowest, 30° on the 18th and 19th. The mean daily range of temperature at Kingstown was 8·5°; at Bournemouth it was 9·7°. The mean temperature of the sea at Sandycove Bathing Place was 51·8°, or 1·3° above the average for November during the previous 4 years. The average sea temperature for the past 3 months of Sept., Oct., and Nov. at Kingstown has been as much as 2·8° above the average for these months during the previous 4 years. These facts may be interesting in connection with the low temperatures recorded elsewhere from the 18th to the 21st of the month. The mean humidity of the air was 73 per cent. The rainfall amounted to 3·61 inches on 17 days; at Bournemouth it was 2·41 inches on 15 days. The duration of bright sunshine was 38·9 hours, whereas at the Ordnance Survey Office, Phœnix Park, it was 54·9 hours, or 15·1 hours below the average for the month at that station during the previous 11 years. It was 39·8 hours at Valentia, 69·9 at Parsonstown, 45·7 at Southport, and 49·6 at Eastbourne.

HYDROPHOBIA FROM A WEASEL'S BITE.

According to the *Medical News* (New York), a milk dealer in Paterson, New Jersey, was annoyed by a weasel which had taken possession of his barn. On August 21, 1902, during his attempts to capture the little animal he was severely bitten. About September 1st he developed symptoms of hydrophobia, from which he died on September 4th.

PERISCOPE

NOTE ON A CURIOUS EPITAPH. BY SIR CHARLES A. CAMERON, C.B., M.D.

THE following curious Epitaph is said to have been written in the "Merchant's Coffee-House," in Essex-street, Dublin, about the year 1753, by Boyle Godfrey, a well-known chemist in those days, a short time before his death :—

EPITAPHIUM CHYMICUM.

"Here lieth to *digest*, *macerate*, and *amalgamate* with Clay,
In *Balneo Arenæ*,
Stratum super Stratum,
The Residuum, Terra Damnata et Caput Mortuum
OF BOYLE GODFREY, CHYMIST,
and M.D.
A Man, who, in this earthly *Laboratory*,
Pursued various Processes to obtain
Arcanum Vitæ,
Or, the Secret to live;
Also, *Aurum Vitæ*,
Or, the Art of getting, rather than making, Gold,
Alchymist-like,
All his Labour and *Projection*,
As *Mercury* in the Fire, *evaporated* in *Fume*.
When he *dissolved* to his first Principles,
He *departed* as poor
As the last Drops of an Alembic;
For Riches are not poured
On the *Adepts* of this World.
Though fond of News, he carefully avoided
The *Fermentation*, *Evervescence*
And Decripitation of this Life.
Full seventy Years his exalted *Essence*
Was *hermetically* sealed in its *Terene Matrass*,
But the Radical Moisture being *exhausted*,
The *Elixer* Vitæ spent
And *exsiccated* to a *Cuticle*;
He could not *suspend* longer in his *Vehicle*,
But *precipitated Gradatim*,
Per Carpanam,
To his original Dust.

May that Light, brighter than *Bolognian Phosphorus*,
preserve him from the *Athanor*, *Empyreuma*, and
reverberatory Furnace of the other World;
Depurate him from the *Fæces* and *Scoria* of this,
Highly rectify and *volatilize*
His ætherial Spirit,
Bring it over the *Helm* of the *Retort* of this Globe,
Place it in a proper *Recipient*
Or *Chrystaline* Orb,
Among the Elect of the *Flowers of Benjamin;*
Never to be *saturated*
Till the general *Resuscitation*,
Deflagration, *Calcination*,
And *Sublimation* of all Things."

X-RAY TREATMENT—A WARNING.

A SUIT has been begun by John Bortoli against the Northwestern University and Lakeside Hospital, Chicago, for injuries alleged to have been received during the course of treatment at these institutions with the X-ray; 12,000 dollars damages are claimed.—*The Medical News*, N. Y., December 13, 1902.

CULPABLE CAUSE OF THE SPREAD OF CONTAGION.

A CULPABLE, even criminal, cause of the spread of contagion is being investigated by the Health Department (Chicago), with a view of presenting the facts to the medical organisations of the city, and to the State Board of Health. This cause is the growing practice among certain physicians of the baser sort of giving certificates of death from contagious diseases, in which certificates some non-contagious disease is assigned as the cause. This is done usually at the request of the family, who wish to evade the restrictions of the Health Department on contagious disease funerals. In one recent case of death from diphtheria the certificate gave the cause as "broncho-pneumonia," and the sole motive of the family in procuring this perjured certificate was that the funeral might be delayed until the following Sunday, while the regulations of the Department require that burials of contagious disease bodies be made within 36 hours after death. In another recent diphtheria death the cause assigned in the certificate was "acute meningitis," and the impelling motive was that a public funeral might be held, contrary to the rules of the Department forbidding public funerals in such cases.—*The Medical News*, N. Y., December 13, 1902.

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"Invaluable in Cholera Infantum."

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18 Cannon-st.,
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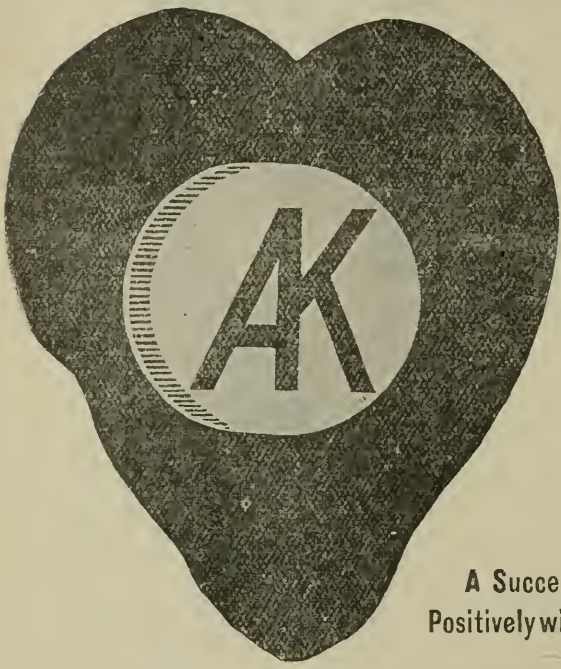

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FORMULA:

Sugar of Milk	...	... ***40 ounces.***
Pepsin (Pure)	...	... ***8 ,,***
Pancreatine (Pure)		... ***6 ,,***
Veg. Ptyalin or Diastase,		***4 drachms.***
Lactic Acid	...	... ***5 fl. ,,***
Hydrochloric Acid		... ***5 fl. ,,***

Note on Formula.—The digestive strength and purity of each drug are tested with the utmost accuracy; and it would be impossible for any chemical establishment to produce a similar preparation without elaborate plant and years of experience. The digestive strength of Pepsin, as commercially known, varies from 500 to 4,000, and like quinine only has medicinal value when proved by analysis. Prof. Attfield says of LACTOPEPTINE that the pepsin is much superior to that ordinarily used in medicine, and that as regards the other ingredients they are the best that can be obtained.

For Diseases of the Stomach.

Proved itself for 30 Years efficient in

Dyspepsia,
Acute Indigestion,
Marasmus,
Impaired Nutrition,

General Debility, Loss of Appetite, Constipation, Morning Sickness, Infantile Diarrhœa, and other Diseases of the Digestive Function.

Dose, 10-15 grs.

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"Scotland, 25th Sept.

"Sirs,—Please forward to Balmoral Castle one dozen 2/6 Tins of BENGER'S FOOD for H.I.M. THE EMPRESS OF RUSSIA, addressed to Miss Coster. We have received the box ordered from Peterhoff.

"Yours truly, F. COSTER.

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